

A HANDBOOK OF THE PHILIPPINES



HAMILTON M. WRIGHT



P.8
(P.2)
(P.4)

311143





Bought in Manila
10th Feb. 1910.

A HANDBOOK
OF THE PHILIPPINES



Uniform with this Work

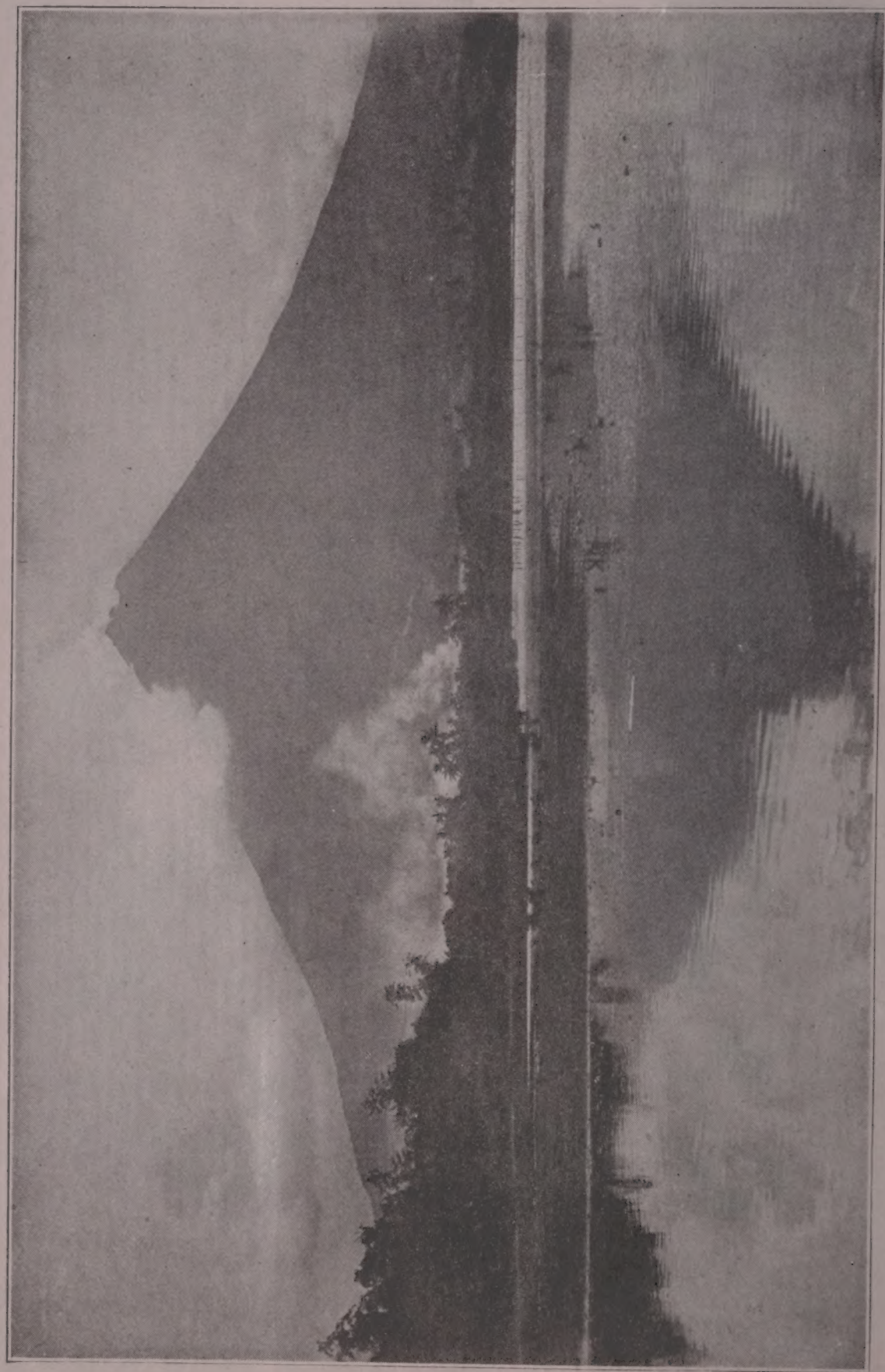
A HANDBOOK OF MODERN JAPAN.

By ERNEST W. CLEMENT. With two
maps and seventy-two illustrations from
photographs. *Seventh Edition.* Price,
\$1.40 net.

A. C. McCLURG & Co.

Chicago





MT. MAYÓN IN ERUPTION, ALBAY PROVINCE, LUZON

A HANDBOOK
OF
THE PHILIPPINES

BY *erces*
HAMILTON M. WRIGHT

WITH THREE NEW MAPS, MADE ESPECIALLY FOR THE
BOOK, AND ONE HUNDRED AND FIFTY
ILLUSTRATIONS FROM PHOTOGRAPHS

THIRD EDITION



CHICAGO

A. C. McCLURG & CO.

1909

DS 655
.W8
1909

COPYRIGHT

A. C. McCLURG & Co.

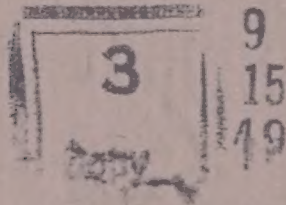
1907

Published September 21, 1907

Second Edition September 30, 1908

Third Edition May 30, 1909

Entered at Stationers' Hall, London, England



THE UNIVERSITY PRESS, CAMBRIDGE, U. S. A.

TO MY FRIENDS
OF
THE FILIPINO CHAMBER OF COMMERCE
WHO BELIEVE THAT THE COMMERCIAL PROSPERITY OF THE
PHILIPPINES ENSURES THE SOLUTION OF THEIR
POLITICAL PERPLEXITIES
AND
THE ABOUNDING WELFARE AND HAPPINESS OF THEIR
OWN PEOPLE

11-472
25 sep 1911

P 8
70
15118

P-4
P-2

CONTENTS

	PAGE
INTRODUCTION	xiii
CHAPTER	
I. PHYSIOGRAPHY	1
II. PHILIPPINE DEVELOPMENTS	15
III. THE PEOPLES OF THE PHILIPPINES	40
IV. MANNERS, CUSTOMS, DRESS, AND HOUSES	56
V. AMERICAN IDEALS AND SCHOOLS IN THE PHILIPPINES	70
VI. FILIPINO TRAITS	88
VII. LAWS AND GOVERNMENT	103
VIII. THE FORESTS OF THE PHILIPPINES	122
IX. HISTORY OF THE PHILIPPINES	135
X. AGRICULTURE	157
XI. MANUFACTURES	177
XII. HEMP-RAISING	189
XIII. TOBACCO INDUSTRY	205
XIV. THE SUGAR INDUSTRY	230
XV. LITTLE-KNOWN OPPORTUNITIES	251
XVI. THE PHILIPPINES FOR THE SIGHTSEER	263
XVII. PHILIPPINE IDEALS	280
XVIII. OBSERVATIONS AND BITS OF TRAVEL	296
XIX. CHRISTIANITY IN THE PHILIPPINES	312
XX. PHILIPPINE COMMERCE	326
XXI. THE FILIPINO AS A WORKER	342
<hr/>	
APPENDIX	361
INDEX	415

ILLUSTRATIONS

Mt. Mayón in Eruption, Albay Province, Luzon . .	<i>Frontispiece</i>
	FACING PAGE
A City in the Interior, showing Old Spanish Brick Streets	8
Tucban, a Beautiful City in Southern Luzon	8
Native Animals of the Philippines	12
Railway-building	20
Group of American and Native Officials	28
"Principales," Santa Cruz, Marinduque	28
Igorrote Women raising Cotton on Rice Terraces	36
Native Filipino Types	42
The Marvellous Igorrote Rice Terraces	48
Igorrotes at Work on their Rice Terraces	52
A Funeral on Romblón Island	68
The Sultan of Sulu	72
Native Buildings	78
Children of the Philippines	82
Filipina Women of the Better Class	96
From the Primitive to the Modern	112
Development of the Constabulary	118
Native Canoes, hollowed from Single Logs	124
Natives hauling Logs on the Beach	124
Native Filipino Industries	128
The Lumber Industry	132
An Inland Settlement	138
Spanish Architecture in the Philippines	150
Peasant Women in the Marketplace at Tuguegarao	162
The Family and Home of a Farmer in the Settled Interior	162
A Cocoanut Grove	172

	FACING PAGE
Boatload of Rich Fruits, Southern Luzon	172
Types of Filipino Children	180
Modern Industries	186
River and Coast Views	194
The Manufacture of Hemp	200
Phases of the Lumber and Tobacco Industries	208
Aspects of Philippine Industries	214
Growing and Curing Tobacco, and a Native Tree	224
Characteristic Scenes in the Philippines	232
A Sorghum Exhibit in an Industrial Parade	240
A Bamboo Wagon in Use on a Tobacco Plantation	240
Scenes under Modern Conditions	252
Primitive Means of Transportation	260
The Manila of To-day	264
Typical American Improvements	268
Views in Manila	274
A Group of Mayors of Small Cities	284
A Group of Provincial Governors	290
Native Women and Children	298
Municipal Building, Santa Cruz, Marinduque	308
Presidente's (Mayor's) Residence	308
Characteristic Views	312
Characteristic Types	318
Types of Old Spanish Cathedrals	324
The Philippines of To-day	330
Characteristic Scenes in the Philippines	340
Executive Offices and Municipal Council at Santa Cruz, Marinduque	346
Señor Ricardo Aguado	352

MAPS

	FACING PAGE
Railway Map of the Philippines	18 ✓
Map of the Philippine Islands showing Tribal Divisions .	44 ✓
Map of the Philippines showing Religions in Provinces .	324

INTRODUCTION

THIS book as its title indicates, is intended to portray the Philippines as they are to-day rather than as they have appeared in the trying crises through which they have passed. The history of the Philippines has not heretofore been neglected. Their interesting past has been chronicled by such eminent writers as Tomás Comyn, John Foreman, F. R. G. S., Juan de la Concepcion, Martinez Zuniga, and many others; while their political (economic) perplexities have been detailed at great length by almost half a score of able writers. But of the Philippines to-day there are few sources to which the inquirer may turn for detailed information; he can find no book treating of modern industrial conditions or interpreting the character of the people through the ready manner in which they are grasping a scheme of life which was unknown to them before the dawn of the twentieth century.

The Filipino people are intelligent, deeply religious, and peaceable, and, for a tropical race, remarkably industrious. Hospitality is their first collective virtue; generosity their strongest individual trait. They are imitative; they progress more rapidly when brought into contact with the white man than when left to their own devices. Through association with him

they learn a better standard of living and attain greater efficiency in working. In short, these adaptable people improve socially, educationally, industrially, politically, and morally. In recent industrial undertakings they have shown an adaptability surprising to even the closest students of the race. In the building of the Manila electric street railways, for instance, it was found that though requiring constant supervision at first, the laborers rapidly progressed; from being weak, listless, and inefficient workers they soon attained eighty per cent of the efficiency of the unskilled American laborer. This ability to accommodate themselves to startling industrial changes the Filipinos share with other Oriental races, the Japanese being in the lead. But the writer believes that no one may safely assert that the character of this people will ever prohibit them from in time attaining the standards of the most advanced nations.

Present industrial developments promise to effect a radical improvement in the material condition of the people. Under the direction and encouragement of the Government almost one thousand miles of railway are being constructed or rebuilt. These lines will lead through some of the richest tropical agricultural districts in the world, affording ready transportation to densely populated districts that heretofore have been handicapped by the lack of it, and, also, opening to development new and unsettled regions of great resources. The Insular Government of the Philippines is undertaking permanent harbor improvements, road-building, and manufactures, as well as the establishment of public schools throughout the islands. At

these schools there are now more than half a million children learning a common tongue. The Government has also undertaken the calling of a legislative assembly, which will afford the people a large measure of home rule and teach them the art of self-government; the enforcement of sanitary and quarantine regulations; the establishment of experimental farms and industrial schools, and the encouragement of legitimate private enterprises. Provincial and municipal councils, under the administration of native officials and guided by the Government, are undertaking many public works which are characteristic of similar bodies in more advanced communities. A number of American concerns are already engaged in productive enterprises, such as mining, hardwood lumber, sugar, hemp, and tobacco.

The profound influence of this industrial awakening upon so assimilative a people as the Filipinos can scarcely be overestimated. They belong to the Malay stock, which is one of the oldest families of the human race. Possessing a natural liking for commerce and barter, they have survived because of their adaptability. The most highly developed Malay branches, as for instance the Filipino Tagálogs, had attained a well-defined civilization long before the advent of the Dutch and Spanish. The modern civilization which they are assuming, therefore, is woven of the same habits of production, barter, and trade to which these people have for centuries been accustomed.

Upon the solution of the humanitarian and economic (so-called political) problems in the Philippines depends the material welfare of the population. The

opinions of responsible Filipino men of affairs and of intelligent foreign observers meet in the belief that with the commercial growth of the islands all the so-called "problems" are disappearing. In short, the people in the Philippines, without regard to politics or nationality, favor the encouragement of commerce and desire the coming of capital under reasonable regulations. As the islands continue to develop, there will be less and less profitless political discussion. The people there will be busy and at work, and the attention of Americans will be directed more and more to the vast opportunities presented by the fertile archipelago. The Philippines will not only demand an increasing supply of American wares and, on the other hand, produce those tropic staples of which we are in need, but they will sooner reach that stature by which they may attain the promised independence, — a condition we will gladly grant as soon as we can honorably and safely do so, while we shall have gained not only a tremendous hold on the commerce of the Orient, but the eternal gratitude and friendship of the Filipino people.

As a strategic trade centre the Philippines are important. There has been a degree of education as to American goods which has not obtained in other portions of the great tropical Orient. American importers are everywhere in the archipelago handling American wares. Elsewhere in the tropical East, from Egypt to Saigon, Americans are but slightly represented. Then, too, the Philippines themselves offer an excellent market for our goods. The islands purchase annually ten million dollars' worth of imports from Europe,

most of which we shall supply as soon as our manufacturers learn to put their goods up in form to meet the demands of the countries in which they are sold.

The Philippines to-day offer us as great—or greater—opportunities than any Spanish-American or Oriental country. It is to unfold these exceptional advantages, to interpret the past history of the Philippines in the light of the amazing grasp with which the natives are seizing upon present innovations, and at the same time to afford the manufacturer, the importer, the exporter, the business man, the investor, and the tourist a simple reference book of the present-day Philippines, their advantages and disadvantages, that this volume is written.

The writer has had perhaps most unusual opportunities for first-hand information. During many months he travelled in the interior of the archipelago, covering almost two thousand miles on horseback and afoot, between various localities, and accomplishing still greater distances by boat and other means here unrecorded. In this journey were collected the photographs and much of the information herein presented.

H. M. W.

SAN FRANCISCO,
June 1, 1907.

A HANDBOOK OF THE PHILIPPINES

CHAPTER I PHYSIOGRAPHY

OUTLINE OF TOPICS: Situation; land area; position on world's highways—A wedge into trade of tropical Orient—Growth of commerce; lines of travel—Size of islands; mountains, volcanoes, earthquakes—Mineral springs; rivers; harbors—Distribution of population; fertile unsettled regions—Climatic conditions; trade winds—Flora and fauna; domestic animals—Manila, the transshipping centre for Oriental trade; dock facilities—Bibliography.

THE Philippine group embraces more than 3,140 islands scattered beneath the fringe of China, of which mainland it was at one time a part, and extending a little over sixteen degrees of latitude,—from $4^{\circ} 40'$ N. to $21^{\circ} 10'$ N., a distance of 1,152 statute miles from north to south. The east and west boundaries extend from $116^{\circ} 40'$ to $126^{\circ} 35'$ longitude E. of Greenwich, a distance of 682 statute miles from west to east.

Few people, perhaps, realize the comparatively large land area of the Philippines. Their aggregate soil area is 127,853 square miles. The archipelago, therefore,

exceeds in size the combined area of the States of New York, New Jersey, Pennsylvania, and Delaware (104,970 square miles). It is nearly twice as large as the five States of New England (66,425 square miles); larger than the New England States, with New York and New Jersey (123,860 square miles); and it is 7,000 square miles larger than the British Isles.

The acquisition of the Philippines has perhaps more than all else tended to bring the United States out of itself and into the world. The reason of this is evident to every one who recalls the position of the archipelago on the world's highways. Manila is the logical port of call for craft plying between the Occident and the tropical Orient, or between the Orient and Australasia. A vessel leaving Europe for China or Japan, *via* Cape Horn or Suez, will approach the islands within a few hundred miles. Similarly, one crossing the Pacific is obliged, if it continue its voyage, to pass north of Australia or south of China. Ships may hardly circumnavigate the globe by natural routes without touching upon the Philippines; indeed it was an undertaking of this sort that led to the discovery of the archipelago when, more than three centuries ago, Magellan sailed around the world, the first navigator to accomplish the feat.

The Philippines is the point of least resistance at which Americans may enter into the vast trade of the tropical Orient,—a commerce which will doubtless within a few generations exceed any in the world's

history. Our direct personal contact with Oriental peoples amid their own surroundings would seem, therefore, to afford an enlightening education as to the needs of Oriental trade, and at the same time the opportunity to cultivate between ourselves and the people of the Orient a mutual appreciation of the good traits of each.

Since the American occupation of the Philippines the rapid growth of commerce with the islands has served to bring us into close communication with the Orient, and to establish firm foundations for a relationship that otherwise would have been long deferred. Manila, the chief port of the Philippines, is distant, as vessels run, between 7,000 and 8,000 miles from the Pacific Coast. It is reached by steamship lines from all our Pacific Coast ports,—San Diego, San Francisco, Portland, Vancouver, Tacoma, and Seattle. The usual duration of a journey is thirty days. All commercial vessels stop at the leading Japanese ports *en route*, thus adding considerably to the time of the trip. From the more northern Pacific Coast ports Japan is often reached in fourteen days or less; steamers not remaining long in Japanese ports could reach Manila a week later at the most. The vessels engaged in transpacific trade are not so fast as those on the Atlantic. A demand is growing, however, for the establishment of direct lines of fast steamers between San Francisco and Manila, and between Seattle and Manila. Save the government transports, not all Orient-going steamship companies

extend their run to Manila. On some lines it is necessary to transfer at Hong Kong. Manila is reached from the Atlantic Coast *via* Europe and Suez. It requires about forty-five days to accomplish the journey *via* Suez. The Philippines are also served by direct lines to South American, European, Australian, and adjacent Oriental ports. Tramp steamers from the Malay Archipelago, the Straits Settlements, and Australia call frequently. Indeed, they would often be compelled to avoid their accustomed routes did they not come within the Philippine group. The islands are distant 6,124 miles by the northern route from San Francisco, and a little less from Portland, Vancouver, Tacoma, or Seattle. Ships going *via* the southern route (Hawaii) travel, of course, a greater distance. Owing to important Japanese and Chinese ports of call, the distance usually traversed is about 8,000 miles.

Mindanao (area 46,721 square miles) and Luzon (area 44,235 square miles) are by far the largest of the Philippine group, each of them exceeding Cuba (area 43,000 square miles), which was acquired at the same time. Samar is the next largest island, having an area of 5,448 square miles; Palawan (Paragua) has an area of 5,037 square miles; the Visayan group, of which Negros, Panay, and Cebú are the principal islands, has an aggregate area of 25,302 square miles. Panay is the largest of this group, 5,103 square miles; Negros, 4,854 square miles; Cebú, 1,782 square miles. Leyte Island has

an area of 4,214 square miles, and Mindoro 4,108 square miles. Only two other islands, Bohol (area 1,614 square miles) and Masbate (area 1,732 square miles) exceed in size a thousand square miles. In all cases the area of adjacent islets has been included in that of the main island.

In general the Philippines are traversed by mountain ranges of volcanic origin, running from north to south. While the larger islands have distinct systems of their own, these are brought into harmony with the general mass of the archipelago by submarine ranges. The occasional outcropping of the hidden ranges forms a series of links connecting the long narrow islands that lie north and south.

There are many volcanoes in the islands, twenty of which are more or less active, and thirty extinct or dormant. The most recent eruption is that of Mayon or Albay (altitude 8,970 feet), on Luzon, which occurred in 1900. Apo, near Davao Bay, Mindanao, the highest peak in the archipelago (altitude 10,311 feet), is solfataric, and still gives vent to grumblings and the spouting of sulphureous steam. One of the most interesting volcanoes is Taal, in Batangas province, Luzon. The mountain rises precipitously from the midst of a fresh-water lake to a height of 1,050 feet. The last violent eruption of Taal was in 1873, although a picturesque eruption occurred in 1903. Earthquakes are of almost continual occurrence, slight shakes being felt at intervals of every few days or weeks in one part or another of the archipelago.

Owing to the pliant framework of the native dwellings, which are constructed of nipa and bamboo, even severe earthquakes ordinarily do but little damage. The last violent earthquake in Manila happened in 1880.

The islands abound in mineral springs, some of which have been known for generations to the people of the Philippines for their medicinal effects. Their waters are of all temperatures, from cold to boiling. They may be roughly classified as sulphur, saline, alkaline, and purgative. An analysis of over fifty of the springs shows them to rival in beneficial properties such famous waters as those at Saratoga in the United States, Kissingen in Bavaria, Wiesbaden in Hesse-Nassau, Prussia, Harrowgate in England, Vichy in France, or Heilbronn in Germany. Los Banos, Laguna province, thirty-five miles by lake from Manila, is the most famous resort in the Philippines, and is visited by thousands. The waters are strongly impregnated with sulphates of sodium, magnesium, calcium, and potassium, as at Seidlitz and Carlsbad, Bohemia.

The abundant precipitation in the Philippines and the rugged character of the interior have given rise to many streams and rivers, which are always of considerable volume in comparison with their length. The largest river in the Philippines is the Rio Grande de Mindanao, which, with numerous large affluents, drains the great central basin of Mindanao Island. The river begins its remarkable course at an altitude

of 5,000 feet above sea level, and, having received the waters of two large inland lakes, it moderates its fall, after a distance of one hundred and twenty-five miles as the crow flies, continuing its course to the port of Cotabato in the Celebes Sea, a distance of forty-five miles further, in a straight line. The river is navigable for boats drawing from six to eight feet of water up to and through the lakes mentioned. Although less in volume, the Rio Cagayan, debouching into the China Sea at Aparri, the northernmost port of Luzon, drains a greater area, 16,000 square miles, which territory embraces almost the entire northeast half of Luzon. At certain seasons the river is navigable to light-draft river boats for a distance of almost two hundred miles.¹ Once every year the Rio Cagayan overflows its immediate banks, rendering artificial fertilization unnecessary to the continuous growing of crops. Sixty-five miles from its mouth it is as wide as the Mississippi at St. Louis. The Agusan, the second river of Mindanao, and third in the archipelago in length and volume, drains, with its great tributaries, the basin of Surigao between two parallel ranges, and empties into the sea on the north. There is a considerable number of other large rivers in the archipelago; among them the Panay, the river taking the name of that island, is one of the finest in the archipelago, comparable in volume to the Rio Grande de Cagayan and the Rio Grande de Mindanao.

¹ We do not know, however, whether boats have actually gone further than Echague, one hundred and forty-seven miles.

There are many harbors in the Philippines, affording commercial and coastwise advantages unsurpassed in the Far East. Of these, Manila Bay is the most important. A concrete sea-wall has recently been constructed affording an absolutely land-locked harbor, secure from the severest typhoons, for vessels drawing thirty feet or less. Deep-sea wharves are now being constructed by the Insular Government, which will permit the largest ocean-going craft to tie directly to the docks. When this is completed Manila will be the only port in all the Far East which affords this facility. In Japanese and Chinese treaty-ports ocean-going craft are obliged to transfer their cargoes to lighters. Vessels drawing eighteen feet of water can enter the Pasig River, Manila.

The population of the Philippines is between seven and eight millions, probably close to the latter figure. Of these more than seven-eighths are Christians, being devoted to the Roman Catholic religion. The first church was built in Manila in 1571; since that date Spanish and native priests have penetrated the archipelago. As a rule the more civilized peoples — embracing both the Christians and the Moros (Mohammedans) — are confined to the coast regions and great valley systems of the entire archipelago; the wild or pagan tribes live in the mountains and more or less elevated valleys of the interior. While the great bulk of the population is of Malay origin, it is divided up among various dialect tribes, and in no region of equal area are there so many different



A CITY IN THE INTERIOR, SHOWING OLD SPANISH BRICK STREETS



TUGUEGARAO, A BEAUTIFUL CITY IN SOUTHERN LUZON

tongues spoken as in the Philippines; but all the peoples are brought under a degree of homogeneity through their common racial origin and the general establishment of Christianity.

The steep volcanic mountain ranges, usually running in parallel courses, have given rise to swift streams, which, carrying down the detritus of the hills, and the mass of decayed tropical vegetation, have built up broad and almost level valleys and plains of an alluvial and mineralized soil of exceeding fertility. Some of these valleys, as, for instance, the Magat Valley, a tributary of Cagayan Valley, of northern Luzon, extend two hundred miles or more from the sea, their upper courses presenting the appearance of broad and almost level plateaus. These fertile regions are almost uninhabited, the spread of population usually being defined by the limits of economical transportation. During the rainy season inhabitants of the interior, lacking good roads or trails, and having flimsy bridges, are frequently cut off from the coast for weeks at a time.

Though the Philippines are all in the tropics, they possess widely variant climatic conditions; no general statement regarding the climate could be made which would not be the subject of innumerable well-founded exceptions. As a rule, however, the climate upon the seacoast may be described as temperate and delightful from November to February inclusive; it is excessively hot in the months of April, May, and June; and intermediate in March, July,

August, and September. Over and above all are the cool nights everywhere. The annual variation in temperature is not uniform throughout the archipelago, being less in places nearest the equator. Even the highest temperatures are perhaps more bearable than, say, that of New York City during its hottest period. Sunstroke is not known. The high mountain districts present a temperate climate with temperate zone vegetation and animal life. The monthly mean in Manila ("the hottest place in the Philippines") varies from 77° Fahrenheit in January to 83° in May. The rainfall is about seventy-five inches annually, two-thirds of which falls in the months of July, August, September, and October. As is usual in tropical countries, business is suspended during midday hours. The rainy season is determined by the high sierras, which arrest the trade winds, and cause the precipitation of moisture. Thus, on the west coast of the archipelago the dry season lasts from November to May; the rainy season from June to October. On the east coast, on the other hand, the season from November to May is distinguished by much precipitation, and the period from June to October is far from being as wet as on the west coasts. Low-lying regions not influenced by a mountainous spur frequently possess uniform rainfall throughout the year. The *baguios*, or strong winds, occur from April to October, and are most frequent in September.

In their unusual variety of fauna and flora the Philippines display interesting evidence of the fact that

they have been subjected to many volcanic and glacial changes. In the Benguet mountain region of Luzon is found a cross-bill bird, the only species adapted to live on the seeds of the pines found there. This bird, belonging to the temperate zone, was evidently driven southward by advance of the glaciers in remote ages; and as the temperature of the lowlands became more and more tropical it escaped to the more congenial temperature of the mountains, where it is still found. The existence of pines and oaks in the Benguet and other mountain regions, and of other life forms corresponding to those of China, indicates that once the archipelago was connected with the continent. This deduction is supported by geological research. There are 284 genera embracing 691 identified species of birds in the Philippines. The number of species is about as great as in the United States, though the number of birds is small. Many of the species are limited to single islands; others, indeed, as on Mount Apo in Mindanao, are confined to a solitary mountain, and, so far as is known, exist nowhere else in the world, an evidence of the volcanic origin of the archipelago. Two indigenous species of deer occur; one — a large, grayish, thick-bodied animal of which there are millions — is found everywhere in the forests and less-inhabited open places. The tiny mouse-deer and the Japanese deer abound in some localities. Horses and *carabao* (Indian water buffalo) have become wild. Other game includes wild boar and jungle fowl, both of which

breed freely with domestic varieties; the *timerau*, or jungle buffalo, of Mindoro Island; pigeons, of which there are forty-two species, some exceeding in size a barnyard fowl and found in great numbers; and ducks, geese, and brant. Predatory animals are limited to a small wild-cat, the boa constrictor, which is infrequent, and the crocodile. Domestic goats, hogs, chickens, ducks, peafowl, and sheep, thrive in some localities. Horses and carabao, except when isolated, have been subject to fearful ravages by the plague, and at a recent period the loss of work animals for the fields plunged the islands into famine. Fresh and salt water fish are numerous, and fishing is a large industry.

A feature of the islands is their vast forests, which contain valuable hardwoods, embracing ebonies, mahoganies, and other cabinet and construction woods which, though little known in the United States, have met with appreciation in the Philippines, China, and to a limited extent in Europe. It is estimated by the Forestry Bureau of the Philippines that two-thirds of the archipelago is covered with forests with a value of two billions of dollars. The wood commercially utilized is said not to exceed one per cent of that which annually goes to waste through natural causes. As a rule, the densest stands of timber are found where there is least population. Thus, on the island of Cebú, the most thickly populated, there are no extensive commercial forests.

We can hardly appreciate too clearly the unusual



NATIVE ANIMALS OF THE PHILIPPINES

Filipino racing ponies — A horn-billed Callas bird — Sheep in the
Cagayan Valley — Philippine baca, or beef cow —
Carabao team hauling logs on the beach

physiographical advantages of the Philippines. The importance of Manila, the chief port, as a shipping centre depends not alone on the agricultural and mineral resources of the archipelago, but upon the facilities at this port for shipping goods to America, China, Japan, Cochin China, the Straits Settlements, Java, Borneo, India, and the islands of Oceanica and Australia. The city's geographical location, her great harbor, and the new dock system, which, when completed, will permit the entrance of the largest ocean-going steamers, all indicate that Manila may soon become the trade centre of the Orient. Manila is two days from Hong Kong, five from Shanghai, five from Singapore, eleven from Colombo, and thirteen from Sydney. Navigable waters wash the shores of a thousand cities and towns, through which pass the entire over-seas traffic of the most densely populated portions of the world; and Manila stands at the gateway of this vast trade. Logically, Manila should be the terminus of all the transpacific lines, and this position will assuredly be rapidly assumed, for the early completion of modern dock facilities will render it the most economical shipping port in the Orient. In all other Oriental ports cargoes must be transshipped by lighters, junks, launches, or river steamers. When Manila becomes, as it assuredly will, the first port of call for transpacific ships, it will be easily reached by vessels of a speed equalling Atlantic travel from California in from thirteen to sixteen days. By reason of their

position the Philippines are a connecting link between the United States and the peoples of the Orient.

BIBLIOGRAPHY.

“Pronouncing Gazetteer and Geographical Dictionary of the Philippine Islands” (Government Printing Office, 1902).
Census of the Philippines. Report of the Philippine Commission.

CHAPTER II

PHILIPPINE DEVELOPMENTS

OUTLINE OF TOPICS: Improvements in the means of transportation — Concessions by the Insular Government for railroad systems — Character of the country to be opened up by the new railroads — Changes that will be wrought by the railways — Harbor improvement, dredging, docks, piers, breakwaters, light-houses, etc. — Post-offices and postal savings banks — Efforts for the improvement of the public health — Opportunities for Americans in all parts of the Philippines — American enterprise beneficial to native industries — Examples of profitable American activities — Foreign banks — Peace works of the American army — Good work done by the newspapers — Salubrity of the climate — Bibliography.

THE Philippine Islands seem to-day on the threshold of a wonderful new industrial era.¹

The construction of a thousand miles of up-to-date railroads; the improvement of harbors and the building of piers that offer the only direct transshipping facilities for ocean-going vessels in the Far East; the entrance of enterprising Americans into almost every line of industry and into every part of the islands; the stimulating initiative of the Philippine Government, and the expenditure of many millions as

¹ "New era" is a term apt to be overused in describing the progress of hitherto undeveloped regions, yet present developments in the islands, in contrast with the past, render the term peculiarly appropriate.

cash wages in return for useful industrial employment, — these and other factors would seem to promise as bright a future for the Philippines as may be expected for any land in all the Orient. In short, the American era is preparing the land for a state of bustling activity which would have been impossible with the poor roads, inadequate transportation facilities, and crude or primitive methods of agriculture prevalent under the former *régime*.

The building of the railroads is, perhaps, the most important step in all the industrial — and therefore sociological — history of the Philippines. The agriculturist has been but little stimulated to produce more than will supply him with the bare necessities of life. In many regions there have been no means of profitably transporting his products to the markets of the world. While it seems certain that no more fertile land lies under the sun, it is probable that there is no country of equal natural wealth where less has been done along modern lines.

More than a year ago the Insular Government, under act of Congress, granted concessions for the building of two general systems of railroads. These systems may, broadly, be classed as the Luzon Island lines, and the lines for the Visayan Islands,¹ *i. e.*, Negros, Cebú, and Panay. The franchises call for the construction of 430 miles of railroads on Luzon Island, and about 300 miles

¹ So called because these islands are all inhabited by Christianized Filipino people who speak the Visayan dialect, a tongue spoken by more than two and one-half millions of people.

on the Visayas. Two features are notable in the planning of the roads; first, that they will go through the most densely populated regions; and second, that their terminals in every case will be upon deep, safe, and convenient harbors. Active work has long begun. The first railroad party, composed of fifty engineers, contractors, and surveyors, arrived in Manila June 8, 1906. In March, 1907, 4000 men were grading on the island of Cebú, 1500 were at work on Panay Island, and thousands of others were at work on almost every branch.¹ On Luzon great progress has been made. Grading has already been begun on the line up the north coast; most of the surveys and rights of way are executed; and construction yards now finished are ready to discharge their mass of derricks and engines to the interior.

¹ The lines in the Visayan Islands are being built by a syndicate composed of Messrs. J. G. White and Company; William Salomon and Company; Cornelius Vanderbilt, of New York; and Charles W. Swift of Detroit; with whom are associated the International Banking Corporation, H. R. Wilson, and Heidelbach, Ickelheimer and Company of New York. For commercial convenience the Philippine Railway Company has been formed, which is the assignee of the award. Under the terms of the award the Government grants a perpetual concession, and guarantees four per cent on the first mortgage bonds for a period of thirty years. Dating from May 28, 1906, the Company has six months to complete its plans and surveys, and twelve months to complete the first hundred miles of route, etc. The work is therefore proceeding more rapidly than provided by the Government stipulations.

The Luzon lines will be built by Messrs. Speyer and Company of New York, who have formed the Manila Railroad Company and taken over the Manila and Dagupan Railroad. The terms under which this Company operates are practically the same as those for

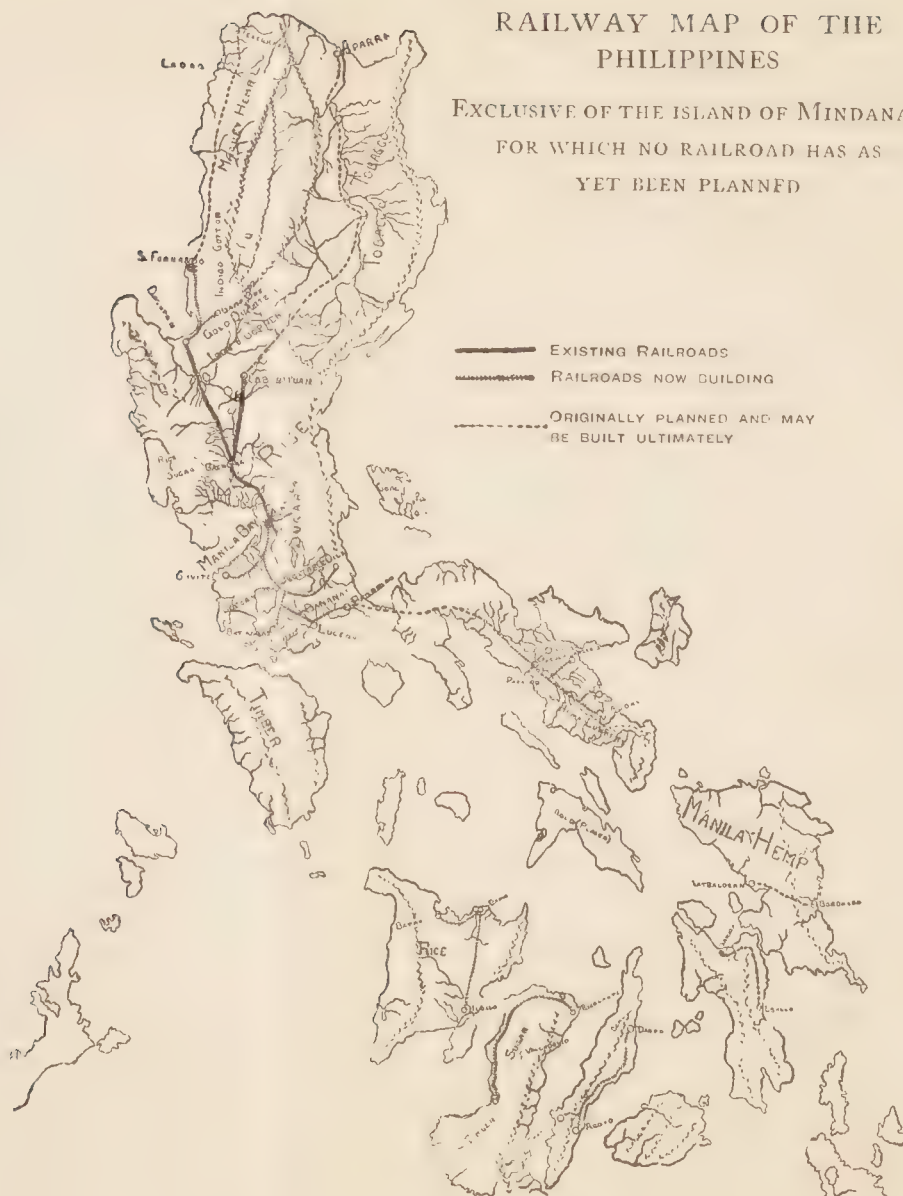
The Manila Railway Company, which has been organized to operate under the award made for the lines on Luzon Island, has assumed control of the existing Manila and Dagupan Railway, which, with its branches, is now more than 200 miles in length. The thorough improvement of this line will insure the islands about 1000 miles of first-class railroads in the near future.

As will be noted by reference to the map (see page 18), the systems as now guaranteed are detached. There will be the lines radiating north and south from Manila, including the present Manila and Dagupan Railway; the lines in southern Luzon peninsula, and lines on each of the islands, Negros, Panay, and Cebú. These lines, affording transportation facilities to much more than half the population, will doubtless some day be widely extended to form a complete network on all the larger islands. Ultimately it is proposed to connect the lines to be built on southern Luzon peninsula with those of the major portion of Luzon, extending the railroad across the mountains

the Visayan lines. The Luzon company does not, however, receive a guarantee on its bonds from the Government. Quality of construction of both roads is to be up to first grade modern standards. The lines are being equipped with heavy American rails and heavy ballast; with steel and concrete bridges to cross the very numerous creeks, estuaries, and rivers, with modern stations throughout the lines, and with block systems and much double track at their terminals. The Philippine Government appointed a Commissioner of Railroads, who reports the progress of the work. Taxation is at one-half of one per cent of gross earnings for thirty years, and one and one-half per cent for fifty years; thereafter, the rate to be fixed by the Government.

RAILWAY MAP OF THE PHILIPPINES

EXCLUSIVE OF THE ISLAND OF MINDANAO
FOR WHICH NO RAILROAD HAS AS
YET BEEN PLANNED



of interior Luzon and down the vast and fertile Cagayan Valley to Aparri, the most northern port of the island, and to follow up the branch now being extended from Dagupan north to Laoag on the northwest coast of Luzon. From Albay, on Luzon peninsula, to Aparri, *via* Manila, would give to Luzon a "Trans-continental System," as it were, of almost 1000 miles in length, while the extension to Laoag and other points would greatly add to the proposed mileage on this single island.

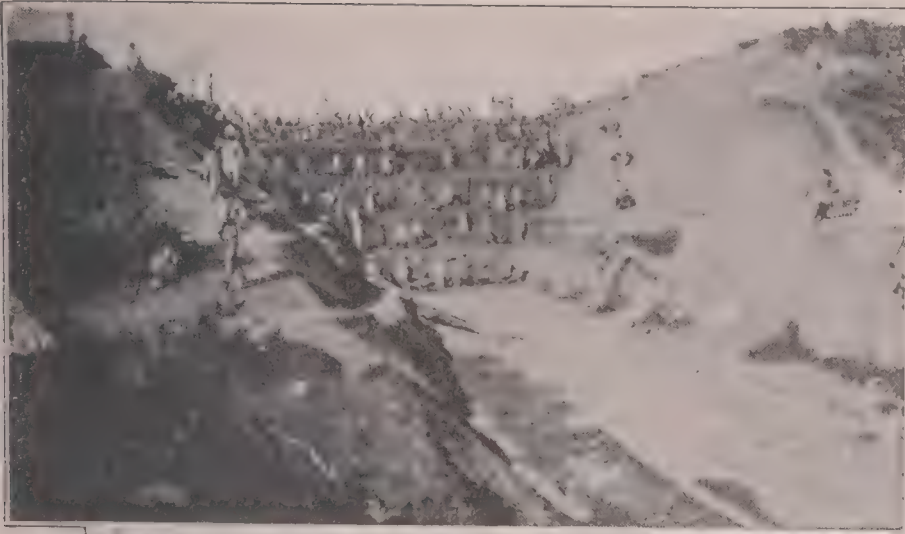
The layman unfamiliar with names and places will be interested to know something of the general character of the country to be opened up by the new railroads. On Negros Island the line, of 108 miles in length, will run from the harbor of Escalante, passing through the greatest sugar-producing regions of the Philippines, on a course ten miles from the coast and generally parallel to it, along the northern and northwestern coasts as far as the harbor of San Juan de Ilog. About three-fourths of the sugar output of the Philippines is raised on a narrow strip of coast extending some fifty miles south of the town of Bacalot, through which the line will run. There being no ports on the west side of Negros, at present all the sugar is hauled out of the interior and sent to Iloilo in small sailing craft that come up the coast with the tide. Thus the line will insure shipment directly from plantation to steamers. In Negros, also, there are vast forests of commercial hardwoods, red *lauan*, the "softest hardwood," which reaches great size, being

especially abundant. *Narra* (mahogany) and other excellent woods are quite plentiful. The large spreading section embraced by the southeast and southwest coasts of Negros Island is not included in the immediate plans, for though very rich and fraught with great possibilities, that region is not densely settled.

On Cebú Island, the most densely populated of the Philippines, the line will run from Danao, along the coast of Argao, sixty miles. The right has been granted the Philippine Railway Company, which is undertaking the work for the Visayan Syndicate, to build across the island to the west coast, an additional distance of twenty miles. The northern terminus will approach rich coal fields. If the people patronize this line as they do the electric railways in Manila and the Manila and Dagupan steam railroad, the trains will generally be crowded to "standing room only."

The line of Panay Island will run from Iloilo, — a city of street cars, electric lights, and modern improvements, — on the southern coast, which now possesses a most excellent harbor, directly north through the rich and thickly populated interior to the town of Capiz on the north of the island, with a branch to the perfect harbor of Batan. The line, exclusive of terminals, will be ninety-five miles long.

Some of the long-settled regions to be opened up by these roads should possess, in the near future, excellent opportunities for the introduction of American machinery and other wares. Money burns the



RAILWAY-BUILDING

Excavating gang at work, island of Cebú — The first
completed grading — Checking off Philippine
Railway Company employees

Filipino pocket, and when the farmers can profitably ship their products they will become great purchasers. Altogether, the railroads will change the face of the islands as rapidly as any single industrial project undertaken by the Japanese has shared in bringing the Flowery Kingdom to the forefront of industrial nations. They will open up some of the richest plantation regions in the world, where nature has placed a veritable garden spot for the production of raw materials and staples of the tropics.

Even more wonderful, because vaster and more diverse in resources, are the rich territories that will be opened up on the island of Luzon. One of the most important systems on Luzon will be that on the extreme southern peninsula, running from the port of Pasacao, on the Gulf of Ragay, south and across the peninsula to the city of Albay on its eastern coast. The spur from Pasacao will join the main line at the important city of Nueva Caceres on the Bicol River, and reached by coastwise vessels, from which point the line radiates in several directions. These lines will open up, without doubt, the greatest rope and cordage producing region of its area in the world. The three provinces to be penetrated by these lines, Ambos Camarines, Albay, and Sorsogon, produce the greater part of the hemp output of the Philippines. Much good land can be had along the railroad survey for hemp-growing. An enormous timber belt containing the most valuable of the many varieties of hardwoods, skirts the western coast of the peninsula,

and much of it is directly tributary to the port of Pasacao.

The most important system is that which will radiate in all directions from Manila, including the present well-established lines. A series of spurs will range south from Manila through the thickly populated parts of Cavite, Batangas, Laguna, and Tayabas Provinces, meeting the sea at the port of Batangas and also the considerable town of Lucena, with a probable direct connection with Pagbilao, which will undoubtedly be an important harbor. The region produces about \$2,000,000 worth of cocoanuts annually, and is rich in bananas, oils, and many native products. On occasions the traveller has spent four days in going from Manila to Lucena, but with the railroads he should accomplish the journey in as many hours.

Two lines will lead from Dagupan, the present terminus of the Manila and Dagupan Railway. One of these will run to the base of the great coast range to Camp One, whence the famous Benguet Mountain Road, twenty-four miles in length, reaches up to the summer capital at Baguio, elevation 5,000 feet. The other extends from Dagupan along the west coast of Luzon to San Fernando de Union. Ultimately it will be extended along the whole of the west coast of Northern Luzon as far as Laoag, and thus will develop the entire rich and populous region of the Ilocano people. Several branches will lead from Manila into interior Luzon. Altogether, with the exception of

the marvellous Cagayan Valley, which is fortunate in possessing excellent water transportation facilities, there is no rich and settled country that will not be reached by the railroads.

It is not hard to forecast the changes that the railroads will work. Along the new line of the Manila and Dagupan Railway, through the interior province of Nueva Ecija to Cabanatuan, the advance of the new cultivation in a rich rice and sugar country has kept pace with the completion of the road. The production extends as far as the eye can reach on both sides of the road, despite the general opinion that the Filipino farmers would not be disposed to settle in new country as the American farmer has settled in the West. A similar advance is to be noted along the line recently built from Manila to Antipolo (altitude 600 feet), a distance of twenty-five miles. So rapidly do agricultural conditions respond to adequate transportation that even in times of depression prosperity was found along the lines of the railroads.

The earnings of the Manila and Dagupan Railway are now more than double those of the best year under the Spanish *régime*. Although the Company was obliged to go to great expense in the repair of bridges, stations, track, and equipment, which were burned, torn up, and in other ways destroyed during the insurrection, it is now in a most satisfactory condition.

The bulk of the money required for the railroads has been raised in London, and not in the United States. The major part of the capital expended in

the building of the Manila street railways — a most profitable and successful venture — was, say the managers, raised in England after the promoters had unsuccessfully ventured to enlist capitalists of New York and other centres. According to press reports, the \$26,500,000 of bonds for the Luzon lines was largely over-subscribed in London, where the issue was floated by the London branch of the Speyers. However, the English are much more familiar with colonial enterprises (England has been made great by her colonies), and they have also more confidence in company concerns than Americans.

Closely allied to the building of the railroads is the improvement of harbors by the Government. The most important works have been undertaken in Manila. In September, 1906, the transport *Logan* was laid alongside of the new military pier (dimensions 500 by 50 feet); and that was the first occasion where a vessel of equal draught tied up in a far Oriental port. Contracts for the dredging of Manila harbor and the building of great breakwaters have been completed. The port of Manila is now generally considered the best in the Orient. Ocean-going vessels are secure in the severest typhoons. The Pasig River will now admit all vessels, to a draught of eighteen feet. The total cost of the work has been about \$5,000,000. Contracts for the construction of two large steel and concrete wharves have long since been let, and the work is progressing. One of these will be 600 by 70 feet and the other 650 by 110 feet.

These piers will be covered with sheds, and will possess trackage facilities for direct unloading into cars. Manila is now the only absolutely free port of the Orient, having neither tonnage, harbor, nor light dues, these having been abolished by the Commission under authority of Congress.

Extensive improvements, involving about \$1,000,000 gold, are being undertaken in the harbors of Iloilo and Cebú. Many other ports throughout the islands have been improved, and general soundings and surveys have been made by the Coast and Geodetic Survey. Light-houses to the number of 105 have been established at important points. Charts and notices are regularly distributed to mariners. In the giving of notice in regard to pending storms the Survey has been materially assisted by the Weather Bureau, one of the finest institutions of its kind, which has been in existence for more than fifty years. But little apprehension is now felt by mariners in regard to typhoons, for their approach is invariably known from four to twenty-four hours in advance — much more often the latter period. It is interesting to note that notice of the great Hong-Kong typhoon in the latter part of 1906 was sent from the distant Manila Weather Bureau in ample time to prevent any disaster. Had the native craft promptly sought shelter, it is very generally believed that no disasters would have occurred.

In line with the improvement of harbors the Government has let five-year contracts to various local steamship companies for Government service, mails,

passengers, and freight. These commercial lines, maintained to a degree under Government supervision, are provided with thoroughly modern standards of comfort and hygiene. Sixty of the important ports of call are regularly visited by thirteen different routes. Mails are despatched with rapidity throughout the Philippines. Delays in travel from port to port have become, for the most part, a feature of the past. There are post-offices in five hundred and fifty different towns. The people are making free use of the registry and money-order departments. The latter particularly has fulfilled a most valuable service. Many of the people are very thrifty, but hitherto have had no depository for their savings. Early after the establishment of the post-office system it became customary to take out money orders payable to "self." The Government has now decided to establish postal savings banks, which will obviate the serious loss to the community caused by burying money in the earth or concealing it in the bamboo rafters of dwellings.

A most useful measure authorized by act of the United States Congress is the establishment of an agricultural bank. The purpose of the bank is to promote the development of the rich resources of the islands, which is now greatly retarded by a lack of the necessary capital. As elsewhere noted, farmers are obliged to pay from twenty to a hundred per cent interest to obtain money to move their crops. The bill provides that the bank shall make loans only on agricultural lands and products; and in order to enlist

the interest of capitalists in the undertaking the local Government is empowered to guarantee four per cent interest on the investment. The money covered by this guarantee is to be a first lien upon the bank's resources, and real estate acquired by the bank under foreclosure is not to be retained by it for a longer period than ten years.

Wire service has, naturally, developed more rapidly than the mails. There are 9340 miles of telegraph, telephone, and cable lines extending to all civilized portions of the archipelago. The service, in which seventy-four per cent of the operatives are Filipinos, is most satisfactory. Much has been done in the building of good roads, an essential to material prosperity. One of the first acts of the Philippine Commission was the appropriation of \$1,000,000 for the construction of roads and bridges. In this work the military authorities lent aid. Each year has seen new appropriations for roads. The encouragement of the Insular Government has borne cumulative results, and many of the provincial governments and the cities throughout the archipelago are devoting great attention to road-building. Quite recently an automobile is said to have made the 140-mile trip from Manila to Baguio, the famous mountain resort, in two days of easy travel, — a feat that would have been impossible a few years ago.¹ The good-roads movement in the

¹ The Manila Railroad Company is running bi-weekly specials, leaving Manila at 10 P.M., and connecting with an automobile stage line at Dagupan for Baguio, "the resort of pine trees and pine log fires."

Philippines has a vast field before it. One can hardly conceive the atrocious condition of interior roads in the rainy season. The author recalls swimming with his horse on a road in the far interior. Many agricultural districts have been stimulated, and planters living back from the railroad stations or steamboat landings have now access to markets. Most of the sizable towns now possess excellent streets.

Essentially contributory to material developments is the effort to improve the public health. Precautions with a view to the betterment of material conditions, such as draining miasmatic sloughs and swamps in cities; the securing of pure drinking water; the banns placed against possibly infected food, as, for instance, garden truck, have all worked wonders. Thousands of babies have been saved through pure water. Rigid quarantine provisions seem to have borne excellent results. Cholera, which spreads more rapidly than any other tropical disease, has been confined to the provinces in the immediate vicinity of Manila, and has not spread from Luzon to any other islands. In the Spanish era and in the early American occupation thousands periodically perished of this plague, which now yields a death list inferior to that of several commonplace diseases.

The achievements in bettering municipal water supplies have been undertaken by an established bureau of expert engineers, chemists, and physicians. Many of the towns obtain their water from sources infected by sewage. Springs are not protected; wells are not



GROUP OF AMERICAN AND NATIVE OFFICIALS



"PRINCIPALES," SANTA CRUZ, MARINDUQUE

covered; and even rain-water is allowed to become filled with the larvæ of insects and thus becomes a source of contamination. It is asserted very often that the adult Filipino of the poorer class, is found, upon examination, to harbor in his intestines parasites dangerous to human health. "The anemia which necessarily occurs when a person harbors such an array of parasites is certainly an important predisposing cause for the high infant mortality, and for the low stature, poor physique, impaired vitality, low mentality, and lack of ambition so often seen among the poorer classes." We would, however, apply this quotation chiefly to the city population.

To-day the stranger need have no fear of disease, for he probably gets much purer water than were he in his home city.

It is impossible to enumerate the activities of the American legislators in the Philippines; and the unselfish, systematic, and thorough method of their labors has, we trust, been indicated. Excellent work, too, is being undertaken by Americans engaged in the various activities, who everywhere seem missionaries of progress and exemplars of easier, better, cheaper, and healthier ways of doing things.

Though the Philippines may hardly be said to be booming at the present time,—if indeed the term "booming" ever appropriately applies to industrial activities in the tropics,—yet the developments are far more common than is generally known. Indeed, there is hardly a district in the habitable Christian

regions where the traveller will not learn of several Americans being engaged in farming, lumbering, mining, or some industrial pursuit. A number, too, are established in remote and unknown districts. There are also some large companies that are operating extensively.

The individual Americans now engaged in agriculture, trade, and industrial enterprises are young men. Their numbers, as elsewhere observed, are composed almost exclusively of former Government employees, soldiers, and those who have been engaged in business in Manila. "The majority of Government employees who have spent two or three years here and have returned to their homes in the States are only too anxious to come back; some are content to remain when their term of office has expired. Already they are growing up with the country." We know of only one pioneer, in the Western sense, who has as yet gone to the Philippines.

The extent to which Americans industrially engaged have penetrated remote portions of the Philippines is really surprising. On the east coast of Mindanao Island, a region practically unknown, where few Americans have ever gone unless sent on Government work, there are several Americans starting plantations. Of the fifty Americans in Davao, Southern Mindanao, some are already reaping the benefits of their industry. One plantation near the settlement is owned by four young Americans, two of whom remain constantly upon the property while the other two are contributing from

their salaries earned elsewhere. The coming of Americans and others with modern methods of agriculture, it is generally believed, constitutes perhaps the greatest benefit that could be conferred upon the people. We recall the case of a colored man, a graduate of Mr. Booker T. Washington's Tuskegee Institute, who had served in the Forty-ninth U. S. Volunteers. He lives in the Cagayan Valley; is a practical blacksmith, horseshoer, and wagon-maker. He has done something for himself in accumulating a good many pesos' worth of wagons, horses, mules, carabao, and land, but he has done even more for his locality in educating the people as to industrial methods. And this practical education is going on almost everywhere.

It is indeed a most favorable commentary upon the opportunities of the country that almost all the wealth gained by individuals during Spanish days was not introduced from Europe, but came of native products. So it seems, too, in the case of leading Americans at the present time. The professions, for instance, are well represented. American lawyers, physicians, dentists, and merchants are to be found in every direction successfully engaged. Yet if one were to select the well-to-do among the American population he would assuredly find that hardly one of them had wealth when he came to the islands. In fact the greater number of the physicians, dentists, merchants, importers, manufacturers, shippers, lumbermen, editors, and attorneys, many of whom are said to be worth more than \$100,000, was recruited from the volunteer army.

Several of the leaders of the Manila bar who are now wealthy men served their country as privates in the volunteers, while among the members of other professions there are many who brought with them absolutely no other capital than industry and integrity. At this point it may be observed that here a high standard of integrity is general among the Americans, and indeed among all commercial and professional men of every race. In fact, we believe that the worthless element, the "beach-combers" who followed the army, have long since entirely departed from the commercial life; for it is so inter-related and subjected to such scrutiny among the comparatively small American population that it would be impossible for a man to bear a good reputation whose record has been unfavorable. The reader has naturally wondered whether the entrance of Americans has not prejudiced native concerns. In rare cases, we confess, this may have been the result; but as a whole the coming of the Americans has proven distinctly beneficial; the exports, imports, and general business are much greater now than in the Spanish era (see Appendix), so that every one has the chance for a larger share of trade. Moreover, most of the American activities are those which direct the native industry into more profitable channels. The street-car systems, for instance, enable the population of Manila and suburbs to travel more rapidly and economically than before, while affording large employment, and educating the natives as to industrial

methods. Even the attorneys, who are often cited as a non-producing class, have exceedingly simplified the former expensive and tedious litigation.

It is impracticable to enumerate the American activities; but a few instances may prove of value. An important American bank has already gained a fair share of the banking business of the country. One large American company is making a success of transportation by water. A famous American football-player is now located at Cebú, and owns two inter-island steamers and an extensive merchandising business, which extends to all the southern islands. A number of large lumbering concerns are now carried on in different districts by Americans. These are acquiring considerable portions of the newly created business both for imported and domestic lumber. The largest private stationary and printing establishment in the country is in the hands of Americans. The second largest establishment in the world for the manufacture of cocoanut products has been organized wholly by American capital, and is making a great success. One of the largest importing and exporting wholesale corporations is under American management, and with American capital has already won the most formidable proportion of current trade. The Manila street railroads, run entirely by Americans, are constantly being extended to distant suburbs; recent bond issues for further developments have been announced in New York and The Hague.

Among the foreign banks in the Philippines are the International Banking Corporation, the Spanish Bank, and the chartered Bank of India, Australia, and China. As a rule the banks in the Orient do an exchange rather than an industrial business. There are several large shipping concerns which are also engaged to some degree in the buying and production of hemp. As a whole, Spanish, Filipino, and Chinese capital controls the bulk of the commerce. But American influence has contributed more to modern methods than all others combined. Thus far only one large purely agricultural enterprise is being undertaken by Americans, — in the Cagayan Valley, Luzon, — though there are many Americans engaged in minor planting projects, aside from those occupied in civil work, teaching, and so on, who contribute to or devote a part of their time to some industrial work. Every one hopes to see many large and successful American plantations in the country.

The civil authorities have received invaluable assistance from the American army. The peace works, such as the building of roads and bridges, the laying out of towns and cities, and the improvement of harbors, constitute a field of activity that the military have occupied with good results. Thus far, the army has hardly received its just meed of praise, because it has done well what every one expected it would do well, although hardly in the line of its traditional activities; and the new lines followed by other organizations have attracted much more attention, for the

reason that at first they were regarded as more or less experimental. The efforts of the commanders to use the army as a peace organization are certainly to be commended, and above all, the work of officers and men in filling with distinction the civil positions to which they have been detailed is worthy of record. In Mindanao and many other places, almost every field of human activity is filled by army men, who have shown a sympathy with the people that has disarmed their suspicions. In the early days of the insurrection, their indignation had been aroused to white heat by fantastic tales of the atrocious cruelty of the American soldier.

Perhaps more than all other agencies have the newspapers aided in inducing a feeling of confidence in the future of the country, and in bringing together the various races. In the latter result the native press, which is most capably issued, has been peculiarly instrumental. There are two morning American dailies, "The Manila American" and "The Cable News," and one afternoon daily, "The Manila Times." "The Daily Commercial Bulletin," a journal of wide industrial interest, issues in book form an annual edition of a most practical and thorough nature. "The Far Eastern Review," is an interesting monthly trade magazine. A bit of enterprise is to be seen in "The Mindanao Daily Herald," published at Zamboanga, Mindanao. There are twenty-two other daily and weekly journals, of which five are Spanish and two are vernacular dailies.

We cannot speak too highly of the American press in Manila nor of the character of the newspaper men there, who, amid amazing difficulties, have introduced the highest standard of American journalistic ideals into the Orient. Fearless and enterprising they not only devote a great deal of valuable space to the encouragement of the industrial growth of the land, but they are the kindest and most understanding critics of the Filipino people.

While the greatest wealth of the Philippines lies in agriculture, and while perhaps there are a hundred Americans therein engaged as against every one occupied in mining, yet a number of mining companies have introduced machinery representing a considerable expenditure and embracing both small stamp mills and the most improved type of gold dredger.

One may hardly measure the opportunities for Americans in the Philippines, through the achievements of the comparatively small American population there at the present time. For generations the Spanish—and they are indeed a delightful people—have made great profits in agriculture and trade, and have amassed large fortunes by methods that to the average American business man would appear dilatory, costly, inefficient, and inconceivably crude for a civilized people. For years the Germans, Chinese, Filipinos, and some English firms have been successfully engaged in industrial and commercial pursuits, despite the rumors of war, famine, and pestilence that formerly filled the



IGORROTE WOMEN RAISING COTTON ON RICE TERRACES

papers of Madrid, and that now often run their cycles through the American press.

While many classes of merchants in Manila have not lately prospered, especially since the withdrawal of the large army forces, yet there is scarcely a well organized and intelligently directed concern that has not succeeded almost beyond the dreams of its projectors. Then, too, one may hardly measure the prosperity of the people as a whole through statistics, since in many regions most of their business is conducted by barter.

The question is often asked: Can a man maintain his health and vigor in the Philippines? Yes, he can, if he pays attention to hygiene and the rules of right living. The Spanish have lived there for generations and have maintained their health and vigor. The question is, rather, whether an American is willing to live in the tropics at all. There are probably few legitimate enterprises in the United States in which a man can amass a fortune as rapidly with a small expenditure of money, energy, and brains, as he can in the Philippines. This expectation may seem visionary to those who have not travelled extensively in the provinces, but it is borne out by the success of various men; it requires but one qualification, and that is that one must be constitutionally able to live in the tropics, and that he does not succumb to the many temptations that beset the pioneer in his idle moments.

The day is not far distant when many home-seekers

from all lands will be drawn to the Philippines by the unequalled charm of the climate and surroundings, and by the opportunity for a happy, undisturbed existence amid conditions wherein is assured a generous competence as the reward of ordinary diligence. To these we will say that the land affords certain conveniences of living that are not to be had by persons in a similar station in the Occident. The most humble American finds himself able to live in a big, low-ceilinged dwelling, with numberless servants, all costing exceedingly little. One boy may bring him tea in the morning when he awakes; another will prepare the shower bath; while a third, who has properly whitened his boots, may assist him to dress. Another boy serves him at breakfast, and still another acts as *cochero*, or driver. If one lives in the provinces where labor is least expensive, there will always be a great number of nice boys and young men who will consider it a privilege to do odd jobs or regular work, so that they may attend the public schools.

In a discussion of the commercial opportunities and developments of the Philippines, we should not lose sight of American ideals. The undertakings of the new era rise above and beyond the proportions of mere industrial projects. Only those enterprises imbued with a humanitarian spirit may succeed, and when seriously undertaken these become great sociological levers. Independent commercial influence is perhaps most helpful; the wide distribution of honestly earned

money among thousands of laborers would seem the greatest teacher of industry and self-reliance.

BIBLIOGRAPHY

Report of the Philippine Commission for 1906, Act No. 1510 of the Philippine Commission, relating in full to the building of the railways in Luzon; Act No. 1497 of the Philippine Commission, relating in full to the building of the railways on Negros, Cebú, and Panay. Copies of both these Acts, and also the report of the Philippine Commission may be obtained from the Bureau of Insular Affairs, Washington, D. C.

CHAPTER III

THE PEOPLES OF THE PHILIPPINES

OUTLINE OF TOPICS: Native population of ancient Malayan origin — Exceptions, wild Indonesians and Negritos — Surprising number of different tongues and tribes — Negritos, the aboriginal dwarf blacks — Indonesians of Mindanao — Characteristics of *Mestizos*; their participation in the commerce of the islands — Trace of Japanese blood in Igorrotes; inherited dislike of Japanese in the islands — Filipinos a homogeneous people as to descent; no apparent physical differences between pagan Igorrote, Mohammedan Moro, and Christian Tagalog — The Christianized Filipinos, pagan Malays, Mohammedan Malays, and Christian Malays — The eight dominant civilized races and principal dialects — Strong trace of Hindu culture; civilization at period of Spanish conquest — Tagalog theatres — Mohammedan Malays; pagan Malays; spirit worship — The Igorrotes; their rice terraces and method of irrigation — Distribution of various tribes and their peculiarities — Admixture of Spanish culture — Rapid advance when brought into contact with more civilized races — Religion among wild tribes; laws; morality; family and tribal relationships — The feudal system among the Moros; their market-places — Obliteration of tribal barriers — Bibliography.

PERHAPS in no region of equal area are there so many different spoken tongues as in the Philippines. A recent classification gives eighty-four different tribal names and thirty-seven dialects. When it is considered that a native who speaks but one of these dialects is usually unable to comprehend any one of the others, amazement increases. This is not, however, due to the presence

of various races, since the native population of the Philippines, with but two minor exceptions, is of a common Malayan origin, and all the peoples speak languages belonging to one common stock; it is due chiefly to the lack of intercourse between the various tribes and the natural or acquired disinclination of the Filipino to move far from the place of his birth.

“Ethnologically no less than geographically the Philippines belong to the Malay Archipelago. With the exception of the aboriginal dwarf blacks, the Negritos, who are still found inhabiting the forest in a great number of localities, all the tribes of the islands, whether Christian, Mohammedan, or pagan, are, in my belief, derived from the Malayan race.”¹ Perhaps the greatest departure, outside of the Negritos, from the well-known Malay type is to be found in the case of those Indonesians who are to be found dwelling as pagan tribes in the heart of Mindanao. The above statement, however, must not be taken to be incorrect, since by many the tribes of interior Mindanao are not deemed to possess sufficient evidence of Caucasian blood to be classified as Indonesians.²

Generally speaking, the native inhabitants of the Philippines may be classified as Negritos, Indonesians,

¹ Dr. David P. Barrows, *Census of the Philippines*, Vol. I, 1905.

² According to the usual explanation, the Indonesians are a people of mixed Caucasian blood, who were in primitive times distributed across the Malay Archipelago, and who find their purest living type in the Polynesians.

whites, Chinese, half-bloods, and Malayans. The Negritos, numbering but 25,000 souls, are considered the true aborigines of the Philippines. They are a cowardly race of half-starved pygmy blacks, subsisting by the precarious fruits of the chase, and living without permanent abode in the mountain forests, where those of pure blood are but seldom seen. They are grouped under no less than twenty-one tribal names, and have many dialects. The so-called Indonesians, numbering over 250,000 individuals, distributed among sixteen tribes, make up a considerable portion of the wild pagan tribes of Mindanao. Their predominant characteristics are their very considerable height, great muscular development, high forehead, aquiline nose, wavy hair, abundant beard, and light color. Of stalwart frame, they are readily tractable, and become most efficient workers under intelligent and sympathetic supervision. By far the most important class next to the whites, which includes resident Americans and Europeans to a number not exceeding 10,000, are the Mestizos or half-bloods. In this classification is to be found much of the most progressive and intelligent population of the archipelago. Since the beginning of Spanish domination the intermarriage between natives and Spanish has been quite general, insomuch that there are thousands of natives throughout the islands, even in most remote sections, possessing a greater or less degree of Spanish blood. This population is largely of commercial bent, and inclines to the capital and larger towns



NATIVE FILIPINO TYPES

Igorrote pygmies in Interior Luzon — Igorrote warrior spear-casting
— Igorrotes at work on the rice terraces,
Nueva Viscaya Province

which have been reached by the commerce of Europe. An important commercial element is found in the Chinese Mestizos, who are actively engaged in mercantile and shipping enterprises throughout the islands. While not nearly so numerous as the Spanish native population, they nevertheless constitute a most progressive industrial force. Of pure Chinese there are now considerably less than 50,000 in the Philippines, the number having perceptibly diminished since the application of the Chinese Exclusion Act to the archipelago. In parts of the islands the physical resemblance of the natives to the Japanese type is greater than the normal resemblance, which is frequently marked. Among the Igorrotes many tribes show markedly Japanese traits, which is believed to be due to an invasion of piratical Japanese in early times. It is an interesting fact that the Filipinos have a dislike to the Japanese, conceiving them to be a most barbarous people, — a conception quite at variance with that of recent visitors to the Flowery Kingdom. The idea grew out of the experiences of native Filipino priests who, early in the Spanish history of the islands, undertook missionary work in Japan. At that time the Japanese had not opened their country to the world. Many of the priests suffered torture and death at the hands of the Japanese; they were afterwards canonized, and the story of their martyrdom was depicted in the books of the ecclesiastical schools. The circumstances thus became known throughout the

archipelago, and resulted in a deep-rooted conviction which time has not obliterated.

Though the blood of numerous nationalities has been introduced into the Philippines, it has not mingled with the original stock in sufficient quantities to exert decisive influences upon the race. Like the Japanese, the Filipinos are a homogeneous people, able to trace their descent from a common stock; their principal characteristics are pronounced, and, once recognized, are unmistakable. Save their difference in dress, it would be impossible to distinguish between a pagan Igorrote from the mountainous heart of Luzon, a Christian Tagalog of humble station of Manila, and a Mohammedan Moro of the Sulu Archipelago. There is also a strong resemblance, mentally and morally, between the various Malay tribes. The Filipinos differ from the Japanese in the division of the people into dialect-speaking races.

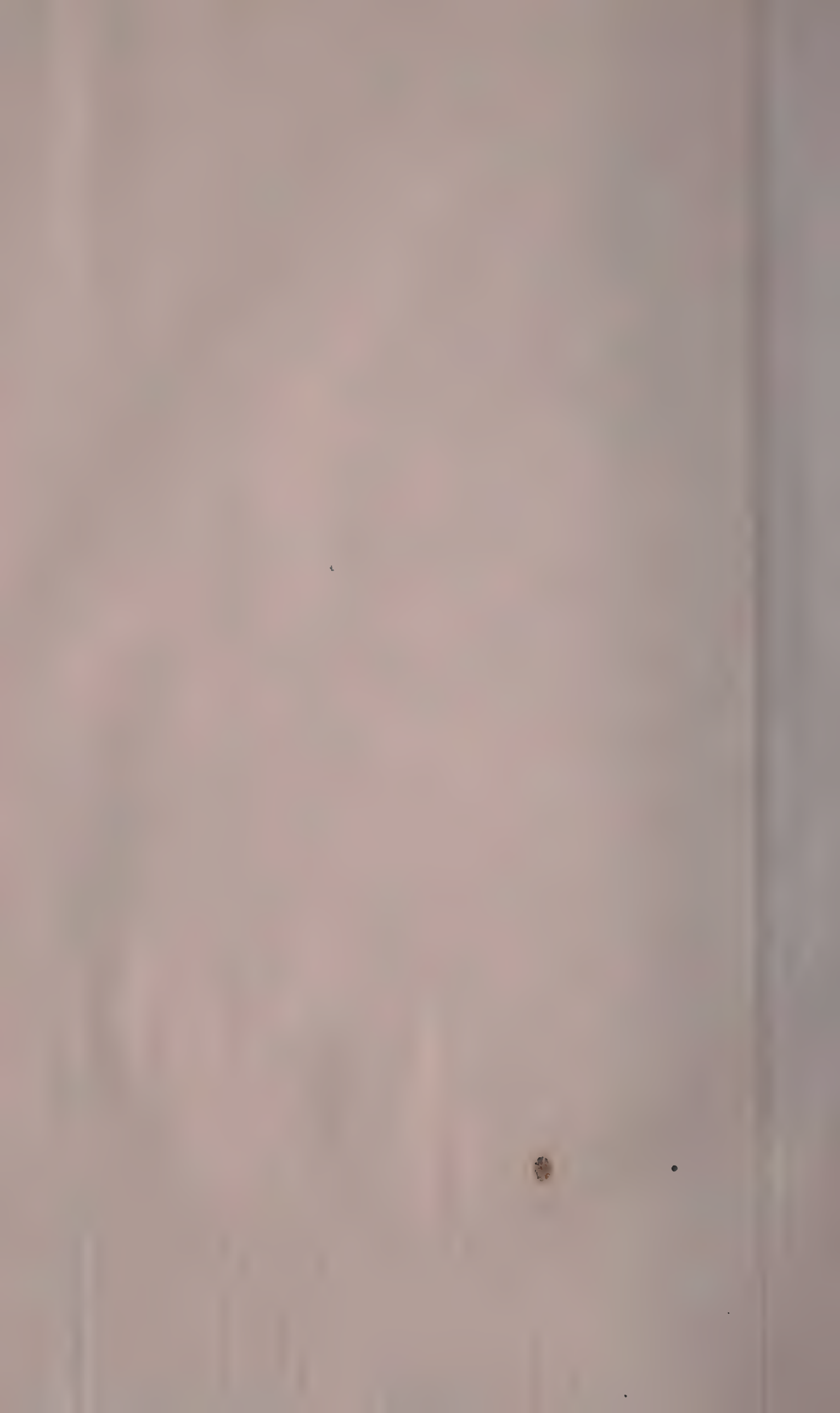
As a whole the Philippine Malays may be classified under three great groups: pagan Malays, Mohammedan Malays or Moros (so called by the Spaniards for their religion, and for their dress, which resembles that of the Moors), and Christian Malays. Probably over ninety per cent of the Filipinos are Christians and profess the Catholic religion.¹ Of the nine dominant Malay tribes in the archipelago, all but one — the Moros, who are Moslemites — profess Christianity.

¹ As shown by the church registry in 1898, 6,559,998 souls were distributed among 746 regular parishes, 105 mission parishes, and 116 missions, — a total of 967 parochial institutions.



MAP OF THE PHILIPPINE ISLANDS
SHOWING TRIBAL DIVISIONS

NOTE.—The Mohammedan Filipinos, popularly termed Moros, are not a distinct tribe, but include many of the sea-going tribes of the Sulu group and Southern Mindanao. They do not therefore here appear under the name "Moro."



The total population of the Philippine Archipelago on March 2, 1903, was, according to the census, 7,635,426. This estimate is possibly considerably less than the actual numbers, especially since among the savage tribes new villages are constantly discovered which were not known to exist. Of this number 6,987,686 (embraced in eight Christian tribes and excepting the Moros, who, though partially civilized by reason of their wild religious belief, a perverted Mohammedanism, have been classified as wild) enjoyed a considerable degree of civilization, while the remainder, 647,740, consisted of "wild" people.

The eight civilized tribes are as follows (the map, p. 44, shows the territory occupied by each tribe):

Name of tribe	Population
Bicol	566,365
Cagayan	159,648
Ilocano	803,942
Pampangan	280,984
Pangasinán	343,686
Tagalog	1,460,695
Visayan	3,219,030
Zambalan	48,823
Total	<u>6,883,173</u>

Of course, it will be noted that the total number of civilized people, 6,987,686, is necessarily greater than the civilized tribes, 6,883,173.

The civilized people, with the exception of those of foreign birth, are practically all adherents of the Catholic Church. The census classes the Moros, population

277,547, among the wild people. We should, however, make a distinction between the Moros who have attained a considerable degree of Mohammedan culture and the true wild people. The Moros embrace two-fifths of the population classed as wild, the remaining three-fifths belonging to various tribes differing from one another in degrees of barbarism.

Among the Christian races the Tagálogs have attained the greatest degree of culture, and by reason of their residence for centuries in Manila and throughout the contiguous regions open to foreign trade, are the leading people of the Philippines. For the same reason they are probably the most mixed in descent. Manila Bay has from very ancient times been a resort of commercial fleets from all quarters. Chinese junks from Fukien were trading here as early as 1250, but the commercial beginnings of Manila long antedate that period. Hindu influence is more marked in the Tagálog than in any other of the Filipino dialects, unless it be that strong Sanskrit influence can be discovered also in the Moro dialects of Mindanao and Sulu. Humboldt observes that the Tagálogs possessed a well-defined civilization at the time of the Spanish conquest of the archipelago. Their written language was perfected to such a degree that it admitted of the writing and staging of plays, which are still conducted in that dialect. In this respect they were more advanced than the rest of the peoples of the archipelago, who in their writing were frequently confined to those curious syllabic scripts that were

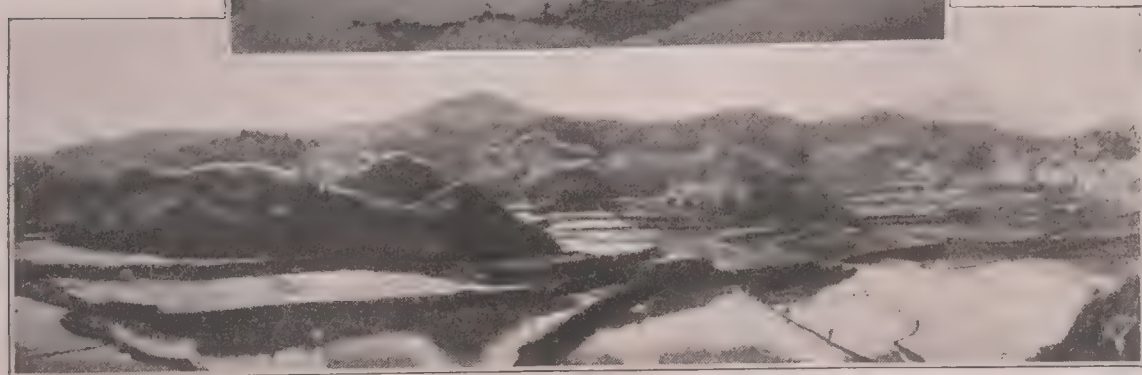
in possession of most of the tribes even before the coming of the Spaniards.¹ At the Spanish accession, however, the more civilized tribes adopted the Spanish alphabet, and to a great degree the written language in place of the Hindu script. The present Moros, however, early took up the Arabic letters, and by the time of the Spanish occupancy the Mohammedan terms *dato* and *sultan* had gradually replaced the Hindu title, *raja*. The time when the Hindu extended his conquest to the Philippines can hardly yet be settled. Great Hindu monuments and temples still exist, in ruins, on the island of Java. They are believed to have been erected fourteen centuries ago.

It is interesting to note the influences of various religious beliefs upon peoples of precisely the same race. The Moros, for instance, being Moslemites, are inspired with the glory of battle; and among the least civilized of them the killing of a Christian in battle is much desired, since the act, it is believed, will enable the warrior to go straight to the arms of Mahomet in Paradise. The Christian Filipinos, on the other hand, are extremely averse to violent crimes, and particularly to the shedding of human blood. The pagan Malays, the Igorrotes, for instance, the wildest of whom believe in the simplest forms of spirit worship, are much given to superstitious rites and weird ceremonies that often involve the taking

¹ According to the Spanish author Retana, in his valuable "Catálogo Abreviado de la Biblioteca Filipina," published in Madrid in 1898, written works have been published and in use in the archipelago in no less than twenty-seven different dialects.

of the heads from their enemies in a neighboring village. As a rule, Igorrote tribes removed from the influence of civilized peoples are in a constant state of feud.

The most colossal industrial undertaking in the Philippines, and perhaps the most stupendous task ever accomplished by a thoroughly savage people, is to be found in the marvellous Igorrote rice-terraces in the mountains of central and northern Luzon Island. Here the Igorrotes have built terraces for the growing of rice, like giant steps up the sides of steep mountain canyons to a height of three thousand feet or more. These terraces, each of which is flooded with water at certain periods of the year, are wonderful feats of engineering; sometimes they follow the contour of a canyon for as great a distance as half a mile without varying two inches from the dead level. The summit of the retaining wall of each terrace is so constructed as to be about fifteen inches above water level, and at the time of flooding it is invariably found that the condition has been complied with. The Igorrotes are the most remarkable of all the pagan races of the Philippines. Perhaps no people, either savage or civilized, have ever further developed the art of intensive cultivation of the soil. None, as far as is now known, have so far progressed in methods of irrigation as have many Igorrote communities. In these regions the Igorrotes run the streamlet that has been deflected for the purposes of irrigation through a mass of manure, decayed



THE MARVELLOUS IGORROTE RICE TERRACES

vegetable loam, ashes, and black alluvial soil; they then conduct it to the rice paddies.¹ Thus they fertilize and irrigate the soil in a single operation, since the water, thus enriched, carries with itself the fertilizing elements and, by force of gravity, distributes them evenly wherever it comes in contact with the soil. In many respects this is a decided step in advance of the methods followed in civilized countries, where the fertilizer, laboriously distributed over the soil, remains until it is unevenly washed about by the subsequent application of water.

In some places the Igorrotes have circled mountains a thousand feet or more in height with successive terraces, each terrace going completely around the mountain.² The finest terraces are located in Nueva Viscaya Province, in the heart of Luzon. They present an inspiring sight; viewed in connection with the primitive condition of the people, there is nothing comparable to them in the world. The pyramid of Cheops, or the tallest "skyscraper" in New York, would appear insignificant beside these clear-cut, Herculean achievements of the simple, ancestor-worshipping Igorrote. Some may compare the Igorrote terraces to the terraces in Japan;³ but neither in size, in perfection of workmanship, nor

¹ The flooded tops of the successive rice-terraces are so called.

² Often, too, these rice-terraces are not built up from the soil, but are carved out of the solid sandstone hillsides.

³ Terraces are common in Java, and there are some in South America, but they present none of the stupendous phases of the Igorrote terraces.

in the almost insuperable obstacles that have been overcome, are the terraces of Nippon to be compared with those in the heart of Luzon. It is not necessary, of course, for the people of the fertile lowlands to undertake such great labors in the cultivation of their fields. The master workmen, the head-hunting Igorrotes who built these terraces, were perhaps a weak and timid people when driven to these mountains by the sea-going Malays generations ago, but to-day they are exceedingly vigorous, of great physical strength and industry, and although actually jolly with foreigners they show a warlike disposition when engaged in a head-hunting feud with some rival tribe in their vicinity. The terraces yield rice so abundantly that in case a village is in a state of siege it is practically provisioned.

The Igorrotes are the most numerous among those peoples of the Philippines which are commonly regarded as wild. The census gives their number as 183,000,¹ made up of many tribes. More recent investigations, however, indicate that the population considerably exceeds the estimate. The Igorrotes, as well as the other pagan Malay tribes of the archipelago, are the descendants of the Malayan tribes which first invaded the Philippines from the south. A later migratory movement of the sea-going Malays forced the less cohesive and less civilized of the natives to the mountains of the interior, where their descendants remain to the present day.

¹ United States Bureau of the Census, published 1905.

The remarkable development achieved by the Igorrotes indicates that it is within the capabilities of the Malays to make a great industrial advance. That the Igorrotes, who are the least generally developed of all the Philippine Malays,¹ have executed such wonders of engineering, and practise more scientific methods of irrigation and fertilization than those of civilized countries, is due to the ability of the Malay race to meet almost any condition with which it has been confronted. In this respect the wild Malay differs from the American Indian, who is disappearing before the white man. Without these terraces the precipitous mountains would not support a large population.

As may be assumed, the Filipino, whether Christian or pagan, takes readily to the mechanical arts. Industrial schools have been established with success among both classes. Modern methods of trade, too, are being taken up readily among the less civilized of the population. In Mindanao the Government has undertaken the business education of the Moros through the establishment of market-places throughout the Moro province. Here the wild tribes bring forest products, which they sell for cash. The Moros, like other Malays, the born traders and bargainers, but the methods pursued have hitherto been

¹ In some respects the Igorrotes are much less advanced than were the Mound-builders of America, for their worship is among the most primitive known, and the terrace-building Igorrotes have no written system of communication, even lacking signs and symbols such as the Cave-dwellers possessed.

greatly to the disadvantage of the less advanced native hillman. The markets, conducted entirely by the natives, have proven a great success. During the first year of their establishment they are said to have done a business exceeding \$125,000. The wild Moros, who at first used coins in the making of crude jewelry are now learning the value of money through contact with more civilized peoples. Slavery, once general among them, is now rapidly dying out, and they promise to develop into a peace-loving, civilized, and industrious community.

Many writers have incorrectly assumed that law and morality among the wild tribes are most lax. On the contrary, among many tribes, their observance is more rigid than in civilized communities. Among the pagan Igorrotes death is the penalty of adultery. Contracts are strictly interpreted with regard to their equity. An Igorrote who has purchased a *sementara*, or rice paddy, for forty hogs will not be obliged to make payment if there be a faulty title, though he may purchase a quitclaim for an amount decided by the tribal council.

Among many of the pagan Malay tribes, which have had little or no communication with the more civilized Malays, there is a pronounced resemblance in savage rites. Many of the Igorrote tribes still practise head-hunting to a considerable degree, and are much given to wild war-dances and ceremonial feasts that incite to cruel and bloody acts. The Ibilao, an unadvanced Igorrote tribe, of Luzon, not



ICHOROTES AT WORK ON THEIR RICE TERRACES

only take the head of a vanquished enemy, but the hands and heart as well. The Ilongotes, another Igorrote tribe, are also absolute savages and head-hunters, each settlement of whom is in constant warfare with neighboring unfriendly villages. They make it a condition to the marriage of a young warrior that he shall have taken a head. Unlike the terrace-building tribes of the high mountains, the Ilongotes seldom live long in one locality, but move their villages from place to place. Among some of the pagan tribes of Mindanao human sacrifice, as well as head-hunting, is practised. The cruel but timid Etas of Mindanao sacrifice the life of a slave to their gods, which are vengeful deities or ancestral spirits. Of all the peoples of the Philippines the Negrito is the least amenable to civilization. Probably he approaches nearer to primitive man than any other race. The strong and industrious Igorrotes are held by Dr. Pardo de Tavera, Philippine Commissioner, to be an element that will be of great beneficent influence in the ultimate development of the islands. Among them women hold a high position; the conception of an unmarried woman is practically unknown.

Perhaps the only Philippine peoples among whom the position of woman is as low as with the American Indian are the Negritos and certain tribes of the Moros. In tribes of unmixed Negritos the women perform practically all the labor. Slavery and polygamy are not uncommon. Even among the civilized

Moros the position of woman is far beneath that of the rest of the tribes of the archipelago. When his finances permit, the Moro avails himself of the four wives permitted by the Koran. The Moro woman among the least civilized tribes performs a considerable portion of the manual labor.

Where wild tribes come into contact with the more civilized peoples, they rapidly assimilate with them and adopt their manners and customs. Thus, on the outposts of Spanish civilization the Igorrotes are Christians and exhibit more or less strongly the evidences of Spanish culture. It is possible that within the next decade or so the marked differences in speech, dress, customs, and manner of worship prevailing among the wild people, and strongly pronounced even in religions where the various tribes are separated by distances of but a few miles, will have disappeared. Under the protection of the Government tribal wars are discouraged, and the native who for centuries has been afraid to leave his immediate village unless in company with an armed escort of his tribesmen, may now — except in a few remote and very inaccessible regions — wander freely through the country. With the stimulating touch of trade and intercourse the amazing present division of the Malay population into many peoples speaking many dialects, and some of them given to the most primitive tribal organizations, will rapidly disappear.

BIBLIOGRAPHY

A fascinating lot of books is available to those who wish to study the ethnology of the Philippines. Among them is "The Bontoc Igorot," by Albert Ernest Jenks, published by the Bureau of Ethnology, Manila; a finely published treatise on the Negrito from the same Department is also of value. "A Social History of the Races of Mankind," Featherman, London, 1887 (account of native races of the Philippines, pages 468-504). "Reisen in den Philippines," F. Jagor, Berlin, 1873; translated. "The Philippine Islands and their People," Dean C. Worcester and Frank S. Bournes: New York, London, 1898. "The Semi-Civilized Tribes of the Philippine Islands," by O. C. Miller (American Academy of Social, etc., Science, Annals, Vol. 18). "The Philippine Islands," Ramón Reyes Lala, New York, 1899 (also of an historical, economical, and political nature).

CHAPTER IV

MANNERS, CUSTOMS, DRESS, AND HOUSES

OUTLINE OF TOPICS: Church festivals and observances at formal social gatherings — Baptism; duties of godparents — Dancing — Bride's dowry — The marrying age — Infant mortality — Necessity for more hygienic living — Prevalence of bathing and general cleanliness — Dress of women, and of men — The Filipino dwelling; its construction and arrangement — Native food and manner of cooking — Domestic life — Bibliography.

RELIGIOUS observances constitute the leading feature of most of the formal social gatherings in the Philippines. As might naturally be assumed in the case of a people who give expression to their religious feelings by many outward manifestations and symbols, the three great events, birth, marriage, and death, are the preëminent occasions of pronounced religious as well as social celebration. Church festivals are always accompanied by music of some sort, either orchestral, brass band, or choir, and sometimes all of these. During the Spanish-American War a popular air much sung by the soldiers was a lively negro melody of the so-called ragtime type, "A Hot Time in the Old Town Tonight." It was not unusual in the provinces for this air to be played with much vivacity at funerals. This

was not due to the unfeelingness of the people, as many supposed, but it was the only tune they had learned from the Americans. In the cathedrals of Manila and the larger cities the music excels in suitability to the occasion and also in rendition.

In the Philippines a birth is regarded as an important event, and the welfare of mother and child becomes the subject of much solicitude on the part of father and grandparents; but the christening of the babe, its entrance into the Holy Church, is considered of greater importance, and is performed with much solemnity.

Baptism usually takes place a week or ten days after birth. The youngster is borne to the church by its mother or some near admiring relative, at the head of a long procession of the men and women of the community. In a provincial town of but 3,000 inhabitants may be seen such a procession three city squares in length, the whole company walking sedately in double file and cleanly attired. At the church the parents (*parientes*) and the prospective godparents assemble about the babe. The rite of baptism is solemnly observed. The holy water is sprinkled upon the little one, and prayers are said for its welfare. The pledge of the godparents is impressive. Its significance rises above that of a mere formal observance. It seems to be followed out in after life, for it is usual that children ever highly regard their godparents, and are by them cherished. Many children whose fathers are unable to afford them schooling are educated by

their sponsors, who are often unrelated to them by blood ties.

After the baptism there is usually a feast and sometimes a dance (*bailé*). In the Philippines a dance is a social event to which the volatile nature of the people readily lends itself. Among the poorest as well as the well-to-do and wealthy classes the amusement is frequent. Of the so-called round dances the waltz is the favorite; Filipino girls take to it as if by nature. The *rigadon*, a stately measure of Castilian origin, which in vivacity at times approaches the Virginia reel (the measure varies with the music), and in dignified courtliness the minuet, is practised on formal occasions even in the remote provinces. Of late the two-step is beginning to be popular. The gallant Filipino blade and his dashing señorita take pleasure in the precise and dignified execution of the dance step. But dancing is by no means confined to the young people. The native matron will be flattered by your invitation, and whatever her age she glides easily over the floor. A roistering dance is unknown; though there may be an abandonment to the spirit of the music and to the rhythm of the measure, there is always in reserve a certain simple and rather Catonian dignity of feature and action which to the Malay is inseparable from the dance, and is especially evident in every formal social gathering. There are a number of native dances, some of which are performed by a single girl only. In one the *danseuse* executes a *pas seul* as she chants a recital of

despair, joy, passion, ecstasy, and surrender. She may kneel before the youth, who for the occasion is assumed to be her recalcitrant lover; she reproaches in a sentiment of melancholy arguing in a gentle monotone which grows to a crescendo as her spirit changes to denunciation; finally, she capitulates in a mood of elated passion, and the lovers are united. Sometimes there is a weirdness in these native dances,—an impression which increases when one goes among the wild tribes, as, for instance, among the Negritos, where a combined chant and dance, both solemn and stately, is performed in honor of the sun.

The stranger in the provinces is amazed to see the ease with which the people glide in the dance in their *chinelas*, a kind of slipper, flat like a shoe with no heel, and just enough upper in front to put the toes inside. This is invariably worn in the distant provinces, where neither women nor men ever wear stockings. Even in the waltz rarely does the *chinela* slip from the maiden's foot. When perchance it does, she glides around the floor in her bare feet, slipping it on deftly when the circuit is completed, without stopping in the dance.

Filipino women are passionately fond of jewelry, and it is not rare that they possess ornaments of considerable value. Though cheap finery is sometimes worn, the taste of the majority is not in favor of the tawdry. Well-to-do men have gold watches that have been handed down from father to son. The Igorrotes, for instance, value gold and silver money, not as a

medium of exchange, but to melt or hammer into earrings, bracelets, or charms.

Marriage in the Philippines sometimes takes place at any early age; the bride may be but eleven years old and the groom but fourteen or fifteen. It is usual, and perhaps natural, for writers and travellers to assume that the Filipinos, being a tropical people, marry early. Yet the observation of residents and the testimony of the census do not confirm this belief. The number of girls under fifteen who are married is less than one in a thousand, while of young men the number is still smaller. The Filipino youth does not usually marry until he is able to provide a home. The marrying age in the Philippines is not much less than in the United States, and the proportion of married persons is about equal to that in this country.¹

When a young couple have been pierced by Cupid's dart, it is customary in the provinces for the prospective bridegroom or his parents to make a settlement upon his bride. If the young man has no dowry to offer, it is frequently stipulated that he shall serve on probation for an indefinite period in the house of his future bride,—as Jacob served Laban to make Rachel his wife,—and not a few drudge for years with this hope before them. John Foreman says:

“Sometimes, in order to secure service gratis, the elders of the young woman will suddenly dismiss the young man after a prolonged expectation, and

¹ Census of the Philippines, Washington, D. C., 1905.

take another *catipad*, as he is called, on the same terms."

The period of service, however, does not now seem to be so frequently exacted as in Spanish times. When the young couple are married they do not make their home alone. Old or dependent relatives come into the family circle for life. Frequently it is some poor relation of the bride's, whose claim may be but the remotest kinship.

The advent of many babes is eagerly looked forward to by every Filipino woman. It is a measure of her love that she shall bring to her spouse a full quiver of sons and daughters. Unfortunately, however, the mortality of very young infants is often exceedingly great, especially among the poorer city populations. The very ignorant seem to lack knowledge of the care of children, and often the little ones, stuffed with unripe fruit, bananas, and half-cooked rice, are swept into early graves. In Manila about three-fifths of all children under one year of age died during 1902. Isolation and quarantine regulations being practically unknown, the frail infants were unable to resist the ravages of cholera. The Government is doing much to educate the people as to more hygienic living, and the good results of this work are made exceedingly apparent through statistics of mortality. Such a proportion of deaths as that just mentioned, however, is not common among the better nourished and cared-for children of the well-to-do in cities, nor of the isolated country population, who

frequently rear large and healthy families. As a whole, the proportion of large families in the Philippines is, according to the census, about the same as in the United States.

Toward the instruction of the people in a more hygienic way of living their natural liking for personal cleanliness is an aid. It is the custom of the people wherever possible to bathe daily. Travelling through the interior, at every shallow ford crossed by the highway one sees the women giving the children the daily bath. The little brown bodies riot in the water, sinking themselves to their chins, splashing one another like small amphibians. Natives travelling, if no stream be near the road, will go far to bathe. Clean clothes are almost a *sine qua non* of Filipino life. In Manila, for instance, one will rarely see a soiled suit on any of the natives. To keep her family in this newly laundried condition requires constant attention on the part of the Filipino housewife. Indeed, one might almost say that the washing of clothes is as much a part of her daily duties as the cooking of food is to her American sister. The laundering is a simple operation. Generally very little soap is used. The family clothes are taken to the edge of a stream in the vicinity. The washer herself goes into the water, and with a resounding paddle deftly beats the garments into a condition of cleanliness. Everywhere in the Philippines one sees hundreds of native women washing in the streams.

The dress of the native woman is attractive. She

wears a flowing skirt of gay colors, — bright red, green, check, and white, being favorite colors. The length of the skirt, and whether the material be cotton, silk, or satin, depend upon her means. Black veils are much affected by the well-to-do, and black garments are sometimes worn on sombre occasions, as funerals. Corsets are as yet unknown; a chemisette which just covers the bosom, and a starched neck-cloth (*pañuelo*), are the usual mode. The *pañuelo* presents the appearance of a great ruffle or collar in the seventeenth-century style. The garment is square, but being folded triangularly it hangs in a point down the back, while the inside fold stands loose and high at the base of the head. The other two corners are gathered together at the breast by a brooch, meeting at the top of the chemisette. The sleeves are wide and flowing. Frequently the women wear embroidered garments, embroidery being an art at which they are clever. The sewing-machine is coming into the islands, and the wives of savages of the forest are commencing to use it. Some tribes, however, as some of the Igorrotes, wear but little clothing. The Filipinos often weave their own garments of cotton and wool. They fashion exquisite fabrics of *pina* and *jusi* (pineapple leaf and hemp filaments), sometimes prettily combined with Chinese silks. Several years ago five thousand Filipino housewives manufactured on their own looms over a half-million dollars' worth of fancy Sinamays and other cloths for export. All in all, the dress of

the native women sets them off singularly, revealing the shoulders and bust, which in the case of the Malay women are often exquisitely proportioned, and not emphasizing the hips, which to our notion are often somewhat narrow.

The native men are gradually assuming the dress of the European in the tropics, — white drill, with coat buttoned up to the neck and finished off with a collar of the same material. Many of the natives still wear the old costume, the shirt of exquisite and richly tinted pineapple leaf fibre or other expensive native fabric, which hangs loose over and outside the trousers. The older schoolboys are beginning to wear shoes and stockings; they carefully choose well-fitting garments, and in a short time after their conversion to Western apparel they assume a particularly neat and somewhat dapper air.¹ Around the cities young men often affect the Derby hat, though the native Manila hats (fibre woven) are much more attractive and suitable.

The house of the Filipino peasant and the poorer classes in the cities is unsubstantial when compared with American standards, but is as a rule more securely built than that of the average Japanese. The framework is fashioned entirely of bamboo, of which there are many varieties in the islands. Nails are unknown, the various joists and beams being

¹ American shoes, especially patent leather ones, are much esteemed, although the appropriate white canvas shoe of the Spaniard is still much more common.

lashed together with *bejuco* or rattan, a vine of as great strength as rope, and used by all the natives as a substitute therefor. The roof, and usually the walls, are thatched, the leaves of the nipa palm being used frequently. Where this does not occur, the tall *cogon* grass or some other is adopted. To make a square joist the natives simply notch the bamboo and bend it toward the inverse side. The floors may be of hewn boards, but usually are made of small bamboo, large bamboo split in halves, or of thatch materials. Frequently there are great cracks in the floor, through which one may look down upon the ground beneath, for Filipino houses are always built several feet above the earth; in districts liable to inundation, or subject to heavy mists, the first story may be elevated a dozen feet. Native dwellings are cool in the day; frequently they are cold at night. The people sleep on the floor without a pillow, simply wrapping a blanket or a thin cloth about themselves. The extremes of temperature to which babes are submitted undoubtedly conduce to mortality among the poorer classes. Couches are built of bamboo, whereon they rest during the heat of the day, for often the Filipino is up and at work before dawn. He will rest several hours during midday, and resuming his labors, will work until the blackness of tropic night overtakes him. On moonlight nights the farmer frequently is in the fields.

The Spanish, under their rule, never allowed the Filipinos to use knives and forks; consequently the

Christianized Filipinos all eat with their fingers.¹ The Igorrotes, however, of precisely the same blood, use knives, forks, and wooden spoons of their own manufacture. The staple food is rice and fish, but when the diet is varied with meats, laborers straightway improve in energy and physique. Maize is a favorite article where rice is not much cultivated, as in the Cagayan Valley, whose people raise tobacco almost exclusively, the corn being planted on the same ground after the tobacco is harvested. Yams or *camotes* (sweet potatoes) are highly esteemed. The cooking is done usually on a little covered platform separated from the dwelling. There are no stoves, the fire being built on a large flat stone under an iron or earthenware dish. Rice is prepared in twenty minutes, but while the grains are made to separate in approved fashion, frequently the cereal has been only partially cooked. Chickens are often fricasseed or broiled, and young pigs are deliciously roasted on a spit. Nothing could be more appetizing than a shote that has been confined in a pen and fattened on rice and sweet potatoes. Fish are frequently cooked by the Filipinos in soup. Many of the natives cultivate their own chocolate, which they prepare deliciously, but in the preparation of coffee they are not expert. At meals the families of the poor seat themselves on the floor and eat out of a central dish. The American

¹ This refers, of course, to the poorer classes ; the well-to-do and wealthy Filipinos live well and often luxuriously, in the manner of the Spanish.

who waits for his host to prepare a meal is often provoked at the delay consequent on the extreme number of scrupulous washings that are given the food, especially if it be a meat dish, before placing it over the fire. Wild game, such as deer and boar, both of which are plentiful and secured by nets or dogs, are greatly esteemed. Salt, while liked, is not used in many sections on account of its scarcity. The lack of it gives rice an insipid taste. In some parts of the archipelago the people mine their own salt, and in others it is procured by the evaporation of sea water. There is a large salt mine in Nueva Viscaya Province.

Sweetmeats for children, and for elders too, are sold everywhere. Every community has its lively marketplace, where are displayed cakes and cookies of sugar, hard, brown, and brittle, and resembling maple-sugar cakes. Cheese, eggs, chickens, sweet potatoes, squash, rice, fish, meats, sections of sweet sugar-cane stalks as tidbits for children, and many fruits, are always greatly in evidence at the markets. Staple products, such as hemp, tobacco, cacao, etc., are often sold. In some distant provinces extensive agricultural fairs are held yearly, where are displayed an amazing number of valuable products of the soil, many of them totally unknown to Americans. The great social instincts of the people lend to their weekly or semi-weekly market days the appearance of *fêtes*. The gayly dressed crowd, their animated chatter, their frank, friendly interest in the visitor and his comings and goings, the garrulous badinage of the old market

women, put one in friendly relations with himself and the world. The Filipino invariably will put a great number of questions to the visitor: "What is your business?" "How old are you?" "Where are you going?" The interrogations would seem to bespeak personal inquisitiveness. He takes such pains to be entertaining that you suspect he has some design. But in reality he may expect never to see you again, he counts on no return for his courtesies or interest in you, and he would not be offended if you were similarly inquisitive concerning himself.

Throughout the archipelago are many *tiendas* or stores, where various luxuries and necessities are dispensed. A purely native store consists merely of a shaded counter enclosed in a dwelling along the highway. Even in these stores you will find frequently beer, pop, ginger ale, colored candies, preserved milk, ginger, betel nuts, and always cigars and cigarettes. In all of the larger towns and villages are general stores with a great variety of articles, some of them highly expensive luxuries. These are kept mostly by the Chinese, who are the traders of the Philippines.

While one may not say that superstition is a Filipino trait, — the Filipino is too much given to stoicism for that, — he often accepts the slightest accidents as predestined; and some ideas which we might regard as superstitious prevail throughout the archipelago. A native hesitates to awake a sleeping person; he believes that the *anito* or spirit, which is



A FUNERAL ON ROMBLÓN ISLAND

away, may not return if the sleeper be thus rudely disturbed. Death is but prolonged sleep. Even intelligent and wealthy Filipinos will hesitate to awake one taking his afternoon siesta. Of course, the intelligent are not deterred by superstition; among them the custom is ancient. Frequently among the wild tribes and those who are more or less associated with them sickness is believed to be due to the presence of evil spirits; and many strange rites are practised to appease the malignant devils. Often enough it is the soul of some departed ancestor who has been slighted or has suffered a wrong. Death is accepted among all classes with strange resignation, but the period of mourning often is prolonged. In the Paco Cemetery in Manila, and elsewhere in the islands, it is not unusual for relatives or friends to keep fresh flowers on the graves of the dead for a number of years.

BIBLIOGRAPHY

A thoroughly standard work is "The Philippine Islands," by John Foreman, New York and London, 1899. Published also by Kelley and Walsh, of Hong-Kong and Singapore. This voluminous book throws much light on native customs, habits, and superstitions, but the author's views are generally not of a hopeful character, owing to his extreme bitterness toward the ecclesiastics. "An American Cruiser in the Far East. Travels in the Philippine Islands," John D. Ford, New York, 1898. "Psychologisches in der Philippine-Frage," and other works by Ferdinand Blumentritt, Berlin, 1899. "A Visit to the Philippine Islands," Sir John Bowring, London, 1876. Some excellent volumes, of which occasional chapters have been translated, were written by the Filipinos and Spanish in the Spanish and Latin tongues.

CHAPTER V

AMERICAN IDEALS AND SCHOOLS IN THE PHILIPPINES

OUTLINE OF TOPICS: Ideals of American administrators exemplified in the public-school system — Spanish system of education — Eager desire of Filipinos for education — Increase in the number of schools and teachers — A morning in a primary school — Aptitude of the native children for learning languages, music, drawing, philosophy, mechanics, etc. — Native teachers — Industrial, mechanical, and domestic science schools — Value of the English language in bringing the people in touch with civilization — The newspapers as educational agencies — Bibliography.

THE American colonial government of the Philippines has been characterized by opponents of the present policy as the most fancifully Utopian and absolutely impossible known to history. Our way is an innovation. It was unheard of that a mother country should extend and plan a general common-school education for the inhabitants of her colony that would afford as great opportunities to the poor as to the rich. Those who had watched the successful administration of European colonies expressed the opinion that the administration of all alien people upon any other principles than those of exploitation or aggrandizement was doomed to failure.

And yet when viewed as the bringer of peace, good feeling, and security to life and property; growth and development to the country; and the conviction to the subjugated people of the unselfish ideals of their conquerors, — our administration of the Philippines has surpassed that of Java under the Dutch, French Indo-China, British India, or any other European colony in the Orient.¹

The American public-school system in the Philippines, placing as it does the advantages of a common-school education within the reach of almost every native child in the islands, is at once the most forceful and the clearest exemplification of the beneficent desires of the American administrators. It is inducing a spirit of democracy which did not exist in Spanish days. The child of the peasant, the humble *tao* or farmer, sits side by side with the son of the *ilustrisimo*, the ruling class to which from time immemorial, — even long before Spanish acquisition, — the common people have bared and bowed the head.

The people of the Philippines, as elsewhere stated, could read and write their own languages when the Spanish arrived. For generations observers have noticed the aptitude of the people for instruction. Thus, Mallet states that the children began very early to make their letters in the sand or on leaves; some of them, he goes on to say (he was writing in 1842),

¹ The long period of British rule in India has resulted in more extensive physical development, but, considering the time the United States have been in control in the Philippines, no nation has so rapidly proceeded in an Oriental colony.

became distinguished calligraphers and could imitate all kinds of writing, drawing, and printed characters. Instruction among the people at that period was far from being backward when compared with that of the lower classes in Europe. Nearly all the Tagálogs, he observes, could read and write.

“Among them can be found advocates [lawyers] worthy to be compared with the most celebrated in Spain. As to literature, there is a Tagal [*i. e.*, Tagálog] grammar and a dictionary, and a combined grammar of other languages. The native literary works consist mostly of poems and tragedies in the Tagal language. The former are sometimes on very grave subjects, such as the Passion, and the tragedies are very long. There are also poems and songs of which both words and music are national; and the Indians [*i. e.*, Filipinos; the Spanish formerly called them Indians] can write the music with wonderful ability.

“The military music of the garrison of Manila and the large towns of the provinces is carried to an astonishing degree of perfection, so that there is nothing better of the kind in Madrid. The Indians play from memory the overtures of Rossini and Meyerbeer.”

Yet it was almost impossible, even then, for the child of the poor to obtain an education. There was, of course, no homogeneity, except that of belonging to a common race, among the people.

There was no general system of primary instruction until 1863, when the establishment of public schools in the municipalities, and of a normal school in Manila for the education of school-masters for



THE SULTAN OF SULU

these schools, was authorized by royal decree ; but these schools differed from the American public school, since very few could take advantage of them. Before that date instruction was confined solely to the children of parents able to pay for it. Even then, according to the historian Semper, writing of it in 1869, "the number of natives who can read and write is tolerably large." The organization of the public-school system was placed in the hands of the friars. "Excepting the professors of common and Roman law, all the chairs of the University of Santa Tomás [University of Manila] are in the hands of the priests, who naturally arrange not only the theological lectures, but those upon metaphysics, physics, and logic, etc., as well, according to the principles of the Catholic Church. Every village has its public schools, but besides reading and writing only Christian doctrine and church music are taught."¹ To this profound religious instruction is undoubtedly due the extreme Christian devotion and submissiveness of the people ; to its limitations is also to be ascribed their lack of progress in material lines.

Not only was the material improvement of the poorer classes discouraged by the ecclesiastical authorities, who virtually controlled the islands, but even the aspirations of wealthy and intelligent Filipinos were greatly hampered. On this point one of their own people, Señor Tomás G. Del Rosario, says :

¹ Semper.

“Although the Spanish Government officially recognized the diplomas of the young men who had spent long years in study at the University [of Manila] and had graduated with the academic degree or as lawyers, physicians, pharmacists, etc., nevertheless these graduates did not receive any official aid in their country, where at that time individual initiative was regarded as a symptom of insubordination or the beginning of future conspiracy.”

This university in 1886-87 had an enrolment of 1,982 students. Yet, despite the fact that popular education was seemingly flourishing almost a half-century ago, it was mostly a veneer, since measures of all kinds were adopted to keep the people in subjection. “The monastic orders were always decidedly opposed to the Spanish language being spoken by the people, because their interests would have been greatly injured if such language had become general, as from that time they would have ceased to be the intermediaries between the people and the authorities, which would reduce their great influence with both parties.”¹ The system of popular education, being thus undermined, was completely abandoned, and teaching gradually passed into complete control of the ecclesiastics. Thus at the present time, despite the great ability of the people to acquire language, less than ten per cent of the population speak Spanish.

Often Filipino parents or guardians make great sacrifices that their children may attend school. In

¹ Señor Tomás G. Del Rosario.

remote regions it is not unusual for children of the very poorest classes to come into the village from their homes, seventy, eighty, or a hundred miles distant, to attend the nearest schools. Frequently it is a far journey, for means of transportation in the interior are often primitive. The separation usually lasts the entire term, and the scholar who is enabled to go home during the short Christmas vacation is fortunate indeed.

Let us attend the morning session of an American primary school in the provinces. We notice at once that there are no vacant seats; that the children are clean and neat; are absorbed in their work, and those of a grade seem of nearly the same age. The American or native instructor (*maestro*) takes pride in exhibiting his pupils. School opens with a prayer. Then, perhaps, for half an hour, come familiar American songs, — “My Country, 'Tis of Thee,” “The Star-Spangled Banner,” “Way Down upon the Suwanee River,” — and some Filipino songs set to our music, and calculated to bring home to the children a love and appreciation of the islands as a whole. One is imbued with an enthusiasm not untouched by pathos at the sympathetic yet vigorous rendition of national and religious songs by the native children of this distant archipelago. Filipino children are not inclined to mischief or roistering. They become intensely interested in work that they comprehend. Often where white children are in the classes they are not younger than the native boys and girls.

After music may come a class in geography. The

children are skilful in the making of maps, by which they are taught not only the geography of the United States and of the world, but more particularly that of their own Philippines, the peoples, harbors, mountains, various agricultural districts, and especially the relation of the archipelago to the rest of the Orient; for while the Philippines have contributed to bring the nation of the United States out of itself and into the world, our occupancy of the archipelago is, on the other hand, tending to bring the Filipinos out of the spirit of isolation in which, under the Spanish rule, they have always, to a great degree, remained.

As each pupil arises to recite, his reply is carefully awaited by the others. Should he hesitate or answer incorrectly, a dozen little brown hands are instantly and eagerly raised. "Ramon," says the teacher, and with serious pride the youth arises to amend the reply of his fellow. Incidentally it may here be observed that all the civilized Filipinos have Spanish names. In the year 1844 Spanish names and surnames were given to the various families by the parish priests. "Hence one meets natives bearing illustrious names," says John Foreman, "such as Juan Salcedo, Juan de Austria, . . . and a great many Legaspi."

In speaking English, children who have learned only through their teacher, and are not in daily association with Americans, select their words carefully and with precision. Their pronunciation, though less incisive than that of natives of the United States, is surprisingly correct. Yet there is often a hesitancy, and a

detachment of the words of a sentence. Filipinos who are constantly with Americans speak fluently without accent, and have as little apparent difficulty with long words as they do with those of Anglo-Saxon origin.

Besides maps, the native children are apt in the making of models. Almost every school gives during the semester an exhibition of the pupils' work. Models of boats, improved *carabao* (water buffalo) ploughs and harrows, models of the native style of vehicle, but patterned to be drawn with less friction and with broad-tired wheels that would not cut the roads into ruts, are shown. All in all, instruction even in the purely literary courses is of a practical nature; for the teachers, whose duties transcend those of mere pedagogues, realize the necessity of an industrial training.

The people eagerly take to the American public-school system. During 1906 there were almost 400,000 native pupils in the public schools, and the enrolment was beyond the capacity of the school-houses and the teaching force. Of more than fifty schools visited in the provinces by the writer, there was not a single one which was not crowded to its limits, and often many more children were enrolled than could be admitted. In some instances the difficulty was partially overcome by making the school day for each pupil only the morning or afternoon session. In the case of very young children the period was satisfactory and adequate. Of course there are a number of private schools throughout

the archipelago; several American firms employing large numbers of laborers provide schools for the children of their workmen.

The object of the public schools in the Philippines is, of course, to educate and enlighten the mass of the people so that they may rise from that condition in which their ignorance almost invariably places them, of dependence if not of actual servitude to the more intelligent population; a situation which is often deplored by leading Filipinos. There are about 1,200,000 children of school age — *e. g.*, between nine and fifteen years — in the islands. At an enrolment of 400,000 per annum every child would receive three years' instruction in the public schools. At the start the school system was planned on this basis, and the work is being carried out on the schedule in a manner that exceeds all anticipations.

In 1906 there were 831 American teachers, all told, in the islands; of those appointed in that year only one resigned. There were, as well, 4,719 Filipino teachers. The salaries of American teachers ranged from \$600 to \$2,000 a year, as follows: —

No. Teachers	Received Yearly	No. Teachers	Received Yearly
2	\$600	3	\$1260
1	660	57	1300
101	900	1	1320
74	1000	3	1350
1	1020	72	1400
3	1080	50	1500
57	1100	9	1600
5	1140	6	1800
340	1200	2	2000



NATIVE BUILDINGS

An Igorrote village — The home of the Sultan of Sulu

The salaries of the native teachers were much less. At the end of 1906 there were in the Philippines 3,160 school buildings. Many of these were built by the municipalities at their own expense; 374 of them are provided rent free.

The average attendance in the public schools in the Philippines is, according to the census, seventy-three pupils to the teacher, as against thirty-six in the United States. The zeal with which the people took advantage of the public schools was no less marked than was their ability to grasp what was taught them. As early as 1902 forty-one per cent of the school children in Manila could use English, and throughout the archipelago at that time the difference in favor of Spanish over English was only six per cent. Filipino students progress steadily from the primary to the more advanced grades. The old theory that there is a point in his progress beyond which the intellect of a Filipino student will not carry him has certainly been disproved. It may be observed here not unappropriately that of the first lot of one hundred Filipino youths sent to universities and other educational institutions in the United States not one failed of promotion at the end of the first year, although nearly all were deficient in knowledge of English.

The readiness with which the Filipinos take to instruction is not a new development. In some districts they seem always to have had schools of a sort in which children were taught, in a rudimentary way, in the predominant native dialects. Even yet there

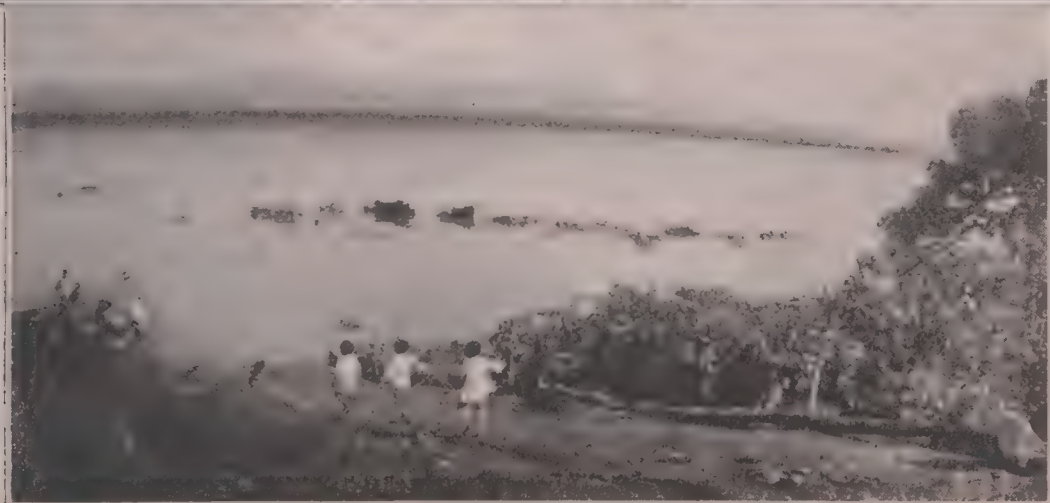
are many of these schools, each under the direction of a native teacher, who perhaps comprehends neither English nor Spanish. There are still many convent schools and private institutions of learning in the archipelago. Of the total number of pupils in 1902 17.8 per cent were in private schools, and 7.4 per cent in religious schools. The average attendance of pupils enrolled is about the same as in the United States.

Although at first the public schools were started on a basis of purely literary training, the necessity for industrial teaching became apparent. Almost all the schools now emphasize this feature. Kindergarten work, domestic science, — in which young women are taught modern cooking and all branches of household work, and are provided with an object lesson in a model dwelling that combines Filipino and American arrangements, — and boys' industrial schools or classes, are frequently adjuncts of the public school in the Philippines. A number of purely industrial and mechanical schools have been inaugurated throughout the archipelago. At the Boys' Agricultural Institute in Tuguegarao, Luzon, an adjunct of the provincial high school, more than half the boys chose the agricultural course; the size of the class was restricted only by the equipment and the teaching force. In a consideration of the fact that the demand for schools has steadily been in advance of their increase in capacity, it must be borne in mind that all the schools in the islands are supported by the people themselves. The schools receive no outside support,

but are maintained by the insular government, by the various provincial governments (which correspond in a way to our State governments), and by the municipalities or cities. Often small communities vie with one another in the erection or donation of buildings. At Banaue, in the heart of Luzon, the Igorrotes hewed out materials for school buildings with their *bolos*. They erected a commodious building, in which a lone school-teacher instructs their children in perfect security amid a population of 8,000 "head-hunters." Filipino teachers sometimes volunteer their services gratis, and some are on the payrolls for one dollar a month. The summer normal school institutes throughout the archipelago are always well attended.

The American army had hardly occupied the Philippines when its officers set about the establishment of the American public-school system. September 1, 1898, immediately after the American occupation, seven schools were organized in Manila. On June 12, 1899, Mr. George P. Anderson, a volunteer officer and graduate of Yale, became Superintendent of Schools. Thirty-nine schools were opened with an enrolment of 3,742. By June 30, 1900, there were twenty-four American and many native teachers, and an average daily attendance of 4,500. The primary reason for the rapid introduction of common schools was the conviction of the military leaders that no measure would so quickly restore tranquillity throughout the archipelago. The response of the Filipino people to this innovation was immediate. Those

who had expressed the fear that common schools, if disassociated from ecclesiastical management, would not be acceptable, found themselves agreeably disappointed. Many of the parochial schools still have continued. The effect has been to increase the number of pupils. Where in a small and distant community there would, perhaps, in Spanish days, have been an attendance of from twelve to thirty pupils at the most, now almost every child of school age attends, and instead of the former slight enrolment, these country schools will have from eighty to two hundred scholars. Every day the extension of the public-school system goes on. As rapidly as the native teachers become proficient, they are placed in charge of instruction, while the work of Americans in the provinces is being more and more given to superintendence, the organization and establishment of new school districts, the encouragement of the people to build new school edifices, and the overseeing and encouragement of the conscientious native teachers. Many American teachers have been withdrawn from the primary work to the secondary schools, toward which an army of native children is being graduated. Hundreds of municipalities are building schools, and teachers are rapidly being supplied to them. In some districts the demands on the American teachers have been so great that they have been compelled to forego class work. Three years ago Governor Juan Pimontel of Ambos Camarines Province, a Filipino gentleman who had risen by his own effort from extreme poverty



CHILDREN OF THE PHILIPPINES
Native students, island of Bohol — Bicol school-
girls — Children bathing in the
Cagayan River

and ignorance to great wealth and a most polished cosmopolitan education, thus wrote the school authorities in Manila: "The people have been friendly . . . and have supported the public schools well. There are no stronger *Americanistas* than those school children who have come within the sphere of the personal influence of the American teachers. Such converts to American ways and ideas are seldom if ever lost. For the present and future welfare of the people of this province, I trust that the entire complement of American primary teachers may be made up."

Mr. Prescott F. Jernegan, of the Manila Normal School, says: —

"The work of the teacher cannot be understood unless he is thought of as discharging the many-sided functions, other than religious, formerly the prerogative of the Spanish friar. Socially, and in his intellectual influence, he is the successor of the man who for centuries was the controlling influence in these primitive communities of the Philippines. He has been the quiet mediator of modern ideas. He has won the affection and respect of the Filipino people. He has fulfilled a great variety of functions of the utmost advantage in securing the loyalty of the inhabitants to the sovereignty of the United States, and implanting the ideals of Western civilization among them."

The teacher tells the mother how to care for her ailing baby, aids unjustly oppressed parents to secure justice; impresses upon the people that they should drink pure water and isolate their sick in cases of infectious disease; shows the municipal authorities

how to lay out city streets and provide for the proper drainage of them; encourages the people to plant vegetable gardens and to build roads, fences, and bridges. In some cases the American "school-ma'am" has paid the salaries of her Filipino teachers when the municipal treasury was empty, and has sent them to the vacation normal institution, paying their expenses. American teachers have written plays, fought bandits, and organized boys' brigades. All in all, the position of our teachers is one of tremendous and singular responsibility; these and other Americans are setting the standard to perhaps the most imitative and adaptable people in the world. It is often said that one is able to tell something of the character of the American school-teacher and constabulary officers in the remote towns by closely observing the people.

Perhaps no teachers in the world are more beloved by their little pupils than are those in the Philippines. After school hours the home of the *maestro* is filled with children and their parents. The former on the approach of a stranger, if they are not accustomed to Americans, become quite shy and will hang reluctantly about the door, until finally their "dear teacher" urges them to come in and become better acquainted with her friends. Respect to elders is inculcated by all Filipino parents.

The success of the public schools has far surpassed the most sanguine hopes. In a few years in the archipelago there will be a mighty army of English-speaking

native young men and women. The proportion of those under the influence of the classroom is about one to every fourteen of the entire population.¹ Even now your school-boy of Manila, if he go to a town a hundred miles north, will talk to the school-boy there in English. With the speaking of English comes the adoption of civilization, as we know it, the reading of American daily newspapers, of which there are a number in the islands, and of American magazines. Thus the people read and learn about railroads, steam-ploughs, harrows, windmills, irrigating plants, shoes, and hosts of other things which they are gradually coming to desire and, in many more instances than is generally believed, to adopt. For the mission of the United States in the Philippines is believed by our administrators to be to teach the young Filipino to walk on his own feet, and to lead him toward industrial and political independence. When within a few years the islands shall be traversed by the great railroad systems now building, the inhabitants of the various provinces will be assisted in commercial and social intercourse through the existence of a common tongue.

Opponents of English education find no sympathizers among the Filipino people. The advantage which the possession of the English language will give him is

¹ That is, in any one year, although during the period of common school age, — six to fifteen years, — all children in the islands should receive schooling. The total enrolment of all Philippine schools, according to the Report of the Philippine Commission, for 1905, is over 500,000.

readily understood by the Filipino; it is fortunate that the acquisition of Spanish was largely denied him.

“English is the common language of business and social intercourse between the different nations from America westward to the Levant. English is the *lingua franca* of the Far East. It is spoken in the ports from Hongkong to Australia. It is, without rival, the most useful language which a man can know; and to the Filipino the possession of English is the gateway into the busy and fervid life of commerce, of modern science, diplomacy, and politics in which he aspires to shine. If we can give the Filipino husbandman a knowledge of the English language, and even the most elementary acquaintance with English writings, we shall free him from that degraded dependence upon the man of influence of his own race which made possible insurrection.”¹

The average American is usually of the impression that before the coming of the Spanish the Filipinos were savages. They were far from that. Though they improved to a remarkable degree through the marvellous success with which the devout monks of Spain established Christianity, yet they have always been a people comparable to the Japanese and Chinese, and possess the same ability to grasp the essentials of our civilization.

BIBLIOGRAPHY

“Six années de voyages aux Philippines,” by Alfred Marche, Paris, 1887; “Education in the Philippines during Spanish Domination,” by Robert L. Packard; Report of Commission

¹ Dr. David P. Barrows.

of Education of United States for 1897-1898; "Reisen in den Philippines," by Jäger, Berlin, 1873. A series of interesting bulletins have been published by the Bureau of Education of the Philippines and issued from the Bureau of Public Printing, Manila. Some of these monographs issued as text-books for the schools imply a high degree of intelligence in the pupils who study them. One of these entitled "Lessons on Familiar Philippine Animals," while most readable, is also extremely valuable from a scientific and industrial standpoint. Many other valuable publications have been issued from the Government press.

CHAPTER VI

FILIPINO TRAITS

OUTLINE OF TOPICS : Extreme hospitality of all classes — Traits of *gente ilustrada* and lower classes — Love of music — Religious devotion — Precocity — Petty crime — “ Little white lies ” — Love of family and of the aged — Simple pleasures — Personal dignity — Loyalty — Indolence — Estimate by Filipinos of their own people — Bibliography.

PERHAPS the first impression which is pleasantly brought home to the traveller in the Philippines is the extreme hospitality of the people. Whether they be rich or poor they ever welcome the visitor. The humblest peasant will kill his last fowl, perhaps his prized *gallo*, — fighting cock, — for the unknown wayfarer who comes unheralded to his abode at nightfall. “ My house is your home, Señor,” says your host; and forthwith he scours the community, borrowing chickens, glasses, and cups for the ensuing feast. The trait is innate in the Filipino character. It is not displayed toward the “ distinguished ” foreigner alone. “ When a native travels he drops in amongst any group of his fellow-countrymen whom he finds having their meal on the roadside.”¹ No one ever need want for food and lodging in the Philippines; doubtless one could

¹ John Foreman, in “ The Philippine Islands.”

travel from one end of the archipelago to the other without a peso in his pocket. Hospitality is the first public virtue in a Filipino community; of domestic characteristics, love to family and parents is perhaps the first impression received.

First impressions are not always lasting. Especially is this the case with regard to an Oriental race like the Filipinos, whom many well-grounded writers have solemnly affirmed to be incomprehensible to the white race. But all writers unite in extolling the extreme hospitality and courtesy of this people. It is no less evident to the newcomer than to the life-long resident; upon the latter, however, the surprising adaptability and imitateness of this race with whom he has been brought into daily association have made a yet deeper impression.

There are in the Philippines two distinct social grades, the *gente ilustrada*, which is the cultivated class, and the *gente baja* or subordinate class. Because its members have wealth, live in handsome houses, and have received some Spanish education, the *gente ilustrada* is the dominant class. They are commonly represented as being the true type of the Filipinos. Yet in a village of ten thousand people there may not be more than a score of families, usually closely inter-related, belonging to the "illustrious" class. "This upper class is very ambitious, — ambitious for education, ambitious for participation in the political affairs of the islands."¹ They

¹ Dr. David P. Barrows.

control, economically and socially, the rest of the population who have no wealth, and who, until the introduction of the American public-school system, had received little or no education. The upper element is active, intelligent, and fairly persevering. It compares favorably with any civilized population. But it is not greatly concerned with the condition of the common people. The uneducated are passive, unambitious, and obedient. Though the ruling class represent the Filipinos as a people, yet they are so obviously in the minority that any description of Filipino traits must be confined to the traits of the masses, who, until the present, have not come into contact with civilization.

Almost every civilized custom which the Filipinos to-day possess they have adopted from the Spanish. Their music, which they love with a passionate devotion, and in the practice of which they display remarkable technique and a sympathetic understanding, they, of course, learned from the Spanish. The wild tribes have but little comprehension of melody; but there is scarcely a civilized village in the Philippines which does not possess its band or orchestra, which usually performs in a manner that would arouse admiration in any country. Frequently a musician, after playing from the notes once or twice, will have no further need for them, but will perform his part in the orchestra, playing in perfect harmony entirely by ear, so pronounced is his native talent. The Filipino Constabulary Band, indeed, took second prize at

the St. Louis World's Fair, being excelled only, in the estimation of the judges, by Sousa's Band, an aggregation of the most competent musicians that could be gathered, and which for years has been schooled under the most superior direction.

Their religion the people were taught by the Spanish padres, Augustinian, Franciscan, Dominican, and Recoleta, who penetrated the archipelago. They embraced it with loving zeal. To-day there are in the Philippines almost two thousand churches and cathedrals, capable of accommodating one-fourth of the Christian population at one time. When it is considered that these edifices, many of them of magnificent proportions and practically all of them excellent embodiments of the architecture of the Spanish renaissance, were constructed entirely by these simple people at their own expense, and under direction of native and Spanish priests, the unselfish and passionate devotion of the Filipinos to their religion, and their ability to appreciate the most æsthetic religious ceremonies of civilized nations, must remain unquestioned. More than that, the Filipinos go to church, and they live up to their enlightenment.

It was the policy of the Spanish not to permit the people to advance too rapidly, lest they might be the less easily directed. For this reason they were taught to read, but not encouraged to learn to write; insomuch that in 1902, forty-four and one-half per cent of the population over ten years of age could read some dialect or language, but only twenty per cent could

write. Thus it is that in some of the customs of civilization the Filipinos are advanced, and in the adoption of others they have remained far behind. It is impossible to say to what extent the Filipinos may not progress, because for the first time they are brought face to face with an industrial civilization which permits a rounded development socially, mentally, morally, and physically.

Filipino children are extremely precocious. It is the opinion of many school-teachers in the islands that they learn much more rapidly up to the ages of fourteen to eighteen than in succeeding years. They are exceptionally clever at memorizing, and in the languages, but not apt in mathematics, or in exercises that call for reasoning or deductive faculties. They may learn to conduct their simple conversations in English in from six months to a year. It is not unusual for native school children of eight or ten years to be the only persons in a remote *barrio* (suburb) who can intelligently direct the traveller. School children almost invariably improve in dress. The boys take to the European dress of the tropics, while the girls cling to the *chemisa*, the attractive looped and open garment of the Spanish women. The older boys and girls of the well-to-do class wear shoes and stockings.

The Filipinos as a race are not disposed toward vicious crimes. The unmentionable assault is scarcely known among them. Their common crimes are of a petty nature, — pilfering and the like. The number of criminals in confinement in the Philippines on

December 31, 1902, was less than eight in each ten thousand of the population. In the United States in 1890 there were thirteen confined criminals to a similar population. Considering the unsettled condition of affairs in the islands during the six years prior to the census, the showing is not only favorable, but remarkable. Many of the causes were traceable to the ravages of the war, and the poverty and theft which followed.

Pauperism is almost unknown in the islands. The professional beggars of India and Italy are not found among the native population. Perhaps this may be due, in part, to the extreme bounty of nature, and, in part, to the generosity of the people toward indigent relatives. According to the census the proportion of paupers was less than one in each ten thousand of the population. For a similar population in the United States it was twelve.

Veracity is not a conspicuous trait of the people. The Filipino is disposed to conceal his real feelings when they would be offensive to the person whom he is addressing. Often even among the well-to-do classes there is a euphemistic way of avoiding the unpleasant truths which might cause annoyances. Indeed, the tendency to equivocate arises as often from the desire to please as from any intention to evade responsibility for an act committed. An Occidental who is accustomed to dealing with the Filipinos will have no difficulty in comprehending them. "They are an Oriental people, and the Oriental

believes in saying to the person to whom he is talking what he thinks that person would like to hear. That is the tendency of the race. You graft on to that the Spanish tendency to *supérlatives*, and a Filipino will talk to you in such language that if you do not weigh it in the light of this trait you are quite certain to misunderstand him and be misled by what he says. He thinks you will construe what he says through that medium.”¹

It must be remembered that the teachings of the Spanish *padres* put no premium on veracity, nor emphasized the presentation of facts in their relative natural proportions. “Such has been the reign of injustice and blind force under which they have lived [for three centuries] that deception was their only defence against merciless oppression.”² The Filipinos have taken from the white race that which they have been taught. “By and by you will succeed,” said Angel Fabi, himself a Filipino and captain of the port of Mindoro Island under Aguinaldo, “and the Filipinos will become more American than the Americans.” Another observer at the beginning of the American occupation well said: “If the Filipinos had associated with them throughout the archipelago a sufficient number of Americans who are honorable and upright in their dealings, there would be a very strong tendency on the part of the Filipinos to do as their colleagues do. They are natural

¹ Wm. H. Taft.

² Rev. Homer C. Stuntz.

imitators; it is a racial characteristic. If they saw their American colleagues were not just in their administration, nor entirely honest, there would be a tendency to follow in their footsteps." The successful Filipino merchant, however, is scrupulously honest in his business dealings.

The family life of the Filipinos has many beautiful traits to commend it. There is always room, and — more than that — genuine welcome, in the home for poor or dependent relatives. Even the drones are supported in the family hive without cavil. In almost every home except the poorest there is some sort of musical instrument. Frequently in the homes of the well-to-do and wealthy you will find the piano or the harp, to the playing of which all members of the family are accustomed. As in most Oriental countries, old age is held in veneration. The father is the acknowledged head of the household. When a daughter marries, she passes from the authority of her parents to that of her husband. Yet Filipino women have a degree of liberty perhaps equalling that of women in America. In popular esteem the women of the common people hold a position above that of their sisters of Japan. The Filipino woman is more saving and industrious than her helpmeet. The direction of the household is always in her hands, and frequently the entire earnings of her husband are turned over to her. Business negotiations are seldom transacted without her concurrence. The Filipino makes an excellent husband and father. He is jealous

of the honor of his wife, but, singularly enough, is indifferent to the indiscretions of his daughter, or of his wife before marriage. All Filipinos love the children, who are docile and well behaved.

The life in the Filipino home of the well-to-do class has many attractions for the European or American. With a usually full quiver of sons and daughters who are given to music and merrymaking, there is ever sparkle to lend diversion to the more sober conversation of the adults. Of visitors there are always many. If a stranger drops into the village, it is customary to regard him more or less as the guest of the community. One will rarely sit down to the generous board without the presence of neighbors who have been invited to assist in entertaining. Even among the poor peasants this is customary.

Most of the pleasures of the people are of a social and innocent nature. Music, weddings, dances, church festivals and solemnities, the assemblage at the market-place, constitute their main diversions. Gambling, though usually of a petty character, is perhaps the chief vice of the people. The Filipino will risk his last penny on a cock fight or a horse race. Why not? He is a philosopher. With the prodigality of nature his few wants will easily be satisfied. Cock-fighting is not an indigenous vice. It was introduced into the Philippines from Mexico, whither it had been brought from Spain.

A wedding is an affair of great social consequence in a Filipino community. Frequently the bride is



FILIPINA WOMEN OF THE BETTER CLASS

but twelve or fourteen years of age and the groom but a few years older.¹ The celebration is accompanied by much dancing and feasting. After the ceremony the couple repair to the *bailé* or dance hall, sometimes a residence. The bride and groom separate and mingle with their friends. They do not display their affection in public, for it is a habit of this people to conceal their emotions.

The personal dignity and self-respect of the people is great. They are extremely sensitive, and resent ill-treatment. They are, however, patient and long-suffering. A Filipino servant may receive brutal treatment for years without protest. At last his nature rebels; he flies into unreasoning passion, sets fire to the house, and disappears. Just punishment is accepted as inevitable, and no grudge is cherished. The Filipino servant who receives a whipping for a theft will think far more of his employer than were the latter to condone the offence. The native, when justly and humanely treated, will remain in the service of his master for a lifetime. He is a great admirer of moral and physical courage. In battle the native troops of the Philippine Constabulary follow their American officers to death, of which they are absolutely without fear. They will believe what is told them by their superiors, and are readily impressed.

Perhaps the most discreditable assertion against the Filipinos as a race, in the eyes of the white man, is

¹ But, as elsewhere noted, the census shows the marrying age to be not much less than in the United States.

that they are indolent. This is in part true. For more than three centuries they have learned from the Spanish that manual labor is degrading; that it implies social inferiority. For this reason the wealthier class of Filipinos never do any manual work. The truth is that the Filipino has not worked as industriously perhaps as he might, for the reason that it has been unnecessary. His wants have been few and simple, and he has not been encouraged to increase them. There are, however, regions in the Philippines where the maintenance of existence calls for unremitting toil. In such sections the adaptable native works hard in the fields from the first gray of dawn until nightfall, with scarcely an interval except for his frugal meal. There are perhaps no more industrious workers than the Ilocanos of the populous northwest coast of Luzon, or the Igorrotes who have built stupendous rice-terraces in the mountainous heart of that island. No tropical people are more industrious than the Filipinos as a whole.

The Filipino agriculturist—which class constitutes over ninety per cent of the population—is not interested in politics. His interests and affections are concentrated in his family, his home, his labors, his petty diversions and pleasures, and the community in which he is born and where he dies, provided he may pursue his life uninterruptedly, and that his labors may meet with a measurable degree of success. “The Filipinos have no political opinions,” says one of their race; “they get all their ideas from their leaders.”

The peasant is thus described by Mr. John Foreman: "He is patient and forbearing in the extreme, sober, plodding, anxious only about providing for his immediate wants, and seldom feels 'the canker of ambitious thoughts.'"

And Mr. Dean C. Worcester says of him: "If cleanliness be next to godliness, he certainly has much to recommend him. Every village has its bath; . . . men, women, and children patronize it liberally."

Let us present two estimates of the Filipino people by those of their own race. Dr. Manuel Xerez, Chief of the Bureau of Statistics, says:

"Ordinarily the native Filipino, because he has been under the influence of the friar for so long a time, is stoical. They are fond of work up to a certain point. They will work as long as it is necessary to gain a livelihood. They have not yet learned to save what they earn by their work, for they have always been obliged, whenever they had any money, to give it to the Church, and in this way they have become indifferent to saving. The imagination of the native, when he talks in his own language, may be easily seen to be very active and easily aroused, considering the small amount of education he has. On account of the education in fanaticism which they have received, they regard life as a transitory state, and they are indifferent to death. It is not that they are brave, but that they think that in the next world they will enjoy a better life than here. Watching the death of a field laborer in the Philippines is like watching the death of a saint, for although he may be suffering very intensely he dies quietly, trusting in God."

Mr. Ramón Reyes Lala, a prominent native of Manila, says :

“Incomprehensible inconsistencies obtain in nearly every native. Students of character may, therefore, study the Filipino for years, and yet at last have no definite impression of their mental or moral status.

“All travellers unite in attributing to the natives extreme family affection. They are very fond of their children, who, as a rule, are respectful and well behaved. The noisy little hoodlums of European and American cities are utterly unknown. The old are tenderly cared for, and are venerated; while in almost every well-to-do household are one or two poor relatives, who, while mere hangers-on, are nevertheless always made welcome to the table of their host. Indeed, the hospitality of the Filipino is proverbial. A guest is always welcome, and welcome to the best. The better class, too, gladly embrace every opportunity to feast their neighbors or the stranger within their gates.”

Some of our readers may consider that in our picture of Filipino traits the faults of the Filipino have been glossed over and his virtues given undue emphasis. It is true, indeed, that the seeming carelessness and indifference of a Filipino servant, for instance, is often extremely provoking. Especially is the American apt to become impatient and indiscriminately condemn the race when neither servant nor employer are able to make themselves clearly understood in the language of the other. Those who live in Manila but for a short period and who do not ever come into intimate contact with the people, so

that they never thoroughly understand them, are often accustomed on their return from the islands to speak most disparagingly of Filipino traits. Some of the American Congressmen and writers who have been in the islands but a few weeks—at the most only several months—have been especially bitter in their estimate of the Filipino character.

But among those who have lived long in the islands, or whose occupation is of such a nature that it has brought them close to the people, there will almost invariably be found to exist high regard and lifelong friendships between the white and brown races. It is not too much to say that the white man then finds the Filipino capable, honest, intelligent, and sympathetic; while if he holds toward him the relation of employer he understands him so thoroughly that you never will find an old resident who will make sweeping statements against the people. He realizes that at the foundation the Filipino is innately worthy and capable of the greatest advances, and that his actions depend largely upon his education and experience,—always, of course, taking into consideration the personal equation which among the Filipinos is as marked as in any other race.

It is as difficult, however, to describe Filipino characteristics precisely as it would be to set forth in a manner not subject to criticism the characteristics of the American people. There are all sorts and conditions of men among the native population of the Philippines.

Suffice it that the Filipino is as yet a child, sometimes naughty, sometimes petulant and rebellious, but still a child, gay at heart, intelligent, gentle, and pliable, who stretches up his hand to us that we may lead him along the path that leads to the manhood of nations.

BIBLIOGRAPHY

Much has been published upon the topics treated in this chapter. Perhaps the most valuable works are those of the Jesuit and Augustinian fathers, some of which have been partially translated by the Government press. Many of the Spanish volumes, however, dating back as far as the seventeenth century, are now out of print. For further information the reader is referred to the following: "The Philippine Islands" (John Foreman, F.R.G.S., 1899); "Social History of the Races of Mankind" (A. Featherman, 1887); "The Peopling of the Philippines" (Rudolf Virchow, 1897); "The Inhabitants of the Philippines" (Frederick H. Sawyer, 1900); "Characteristics of Christian Tribes" ("The Census of the Philippines," Vol. I, 1903); "The Pearls of the Orient" (Henry Savage Landor, 1902).

CHAPTER VII

LAWS AND GOVERNMENT

OUTLINE OF TOPICS: American desire to cherish patriotism — Condition of the Filipinos before the American occupation — Beginnings of self-government — Rights guaranteed to the Filipinos by an act of Congress in July, 1902 — Peonage among the Malays — Creation of the Philippine Commission — Government Bureaus, and functions of each — Courts — Constabulary, or civil police of native troops under American officers — Establishment of a Constitutional Assembly — Subjection of the Insular Government to the United States Congress — Dissatisfaction with this subjection, and especially with the tariff laws — The Philippines a self-supporting country — Agricultural, mineral, and forestry land laws — Land titles — Monetary system — Civil service — Inoculation for the prevention of disease — Bibliography.

IN assuming sovereignty over the Philippine Islands the American people have not intended to extinguish Philippine patriotism. It has been our purpose and object, rather, to increase that spirit and to provide the people with laws and a form of government established as closely upon American ideals as possible.

It is, of course, recognized that from time immemorial the Filipinos have never enjoyed the privileges of self-government. Before the coming of the Spanish the half-million natives were governed by various chiefs, and individual liberty was an ideal perhaps unconceived of. During the more than three

centuries of Spanish rule the people were not encouraged to take part in the affairs of government; moreover, the government which they then had was scarcely of a character to implant in their hearts a knowledge of the principles and responsibilities of self-government. Had America not intervened to assist the people in their struggle against Spain, and had they been able to free themselves from Spanish domination, it is quite certain that though the government set up by them might perhaps have been in name a republic it would never have been a pure democracy.¹ The bulk of the population would have been most certainly ruled by an inconsiderable minority, or the country would have been divided into various petty States. Whatever would have been the outcome, it was felt that the United States could not safely withdraw while the people were incapable of protecting themselves either from a foreign nation or, what seemed inevitable, internal dissension and bloodshed.

Speculations as to what might have been are always uncertain, though by their nature they may cast light upon the present. Thus it is with our occupation of the Philippines. Having come into the country when its leaders were aspiring toward religious and social freedom and independence, and were groping toward means by which these might be

¹ That is, of course, assuming that the islands would not have been taken possession of by some other Oriental or European nation.

secured, the United States is endeavoring to teach the people the art of self-government, and so to fulfil her obligations to mankind and her pledges to them. No other great nation has ever undertaken to extend autonomy to an alien subject race. Without laying ourselves open to a charge of political bombast, it may be truthfully said that the step marks a new and higher ethical position in the standard of nations.

In our guidance of the Filipino people we purpose leading them along the path we have trod. The Government of the Philippines is inspired by those free and democratic principles which have made the American people a great, strong, and happy nation. By an act of Congress¹ signed by the President of the United States on July 1, 1902, those personal rights that belong to the citizens of all enlightened nations are guaranteed to the people in terms which bear a close resemblance to the wording of the Constitution of the United States. The following are some of the provisions, in abridged form:

The people have the right to call themselves citizens of the Philippine Islands, and as such are entitled to the protection of the United States.

No person shall be deprived of life, liberty, or property without due process of law.

The rules for trial by jury, in criminal prosecutions, are identical with those in the United States.

¹ Act of July 1, 1902 (public No. 235), entitled: "An act temporarily to provide for administration of the affairs of Civil Government in the Philippine Islands, and for other purposes."

No person shall be imprisoned for debt.

No law impairing the obligations of contracts shall be enacted.

Habeas corpus may not be suspended except when, in cases of rebellion, suspension of it may be required by the public safety.

No *ex post facto* law or bill of attainder shall be enacted.

Slavery and involuntary servitude shall not exist.

Excessive bail shall not be required.

No cruel and unusual punishments shall be inflicted.

The people are guaranteed against unreasonable searches and seizures.

Religious freedom, freedom of speech and the press, liberty to assemble, separation of Church and State, are guaranteed.

The rule of taxation is uniform throughout the archipelago.

No private or local bill may be enacted which shall embrace more than one subject, and that subject shall be expressed in the title of the bill.

In short, to the citizens of the Philippine Islands are granted the same freedom of person and property as is enjoyed by the citizens of the United States.

The significance of the document granting constitutional liberties to the Filipino people is as profound as that of the Magna Charta or the Declaration of Independence. Peonage, or practical slavery, has prevailed from time immemorial in many forms among the Malay people. It is not a Spanish institution, for it is found among the Moros of Mindanao who never recognized Spanish rule, as well as in other Malay States outside the Philippines. It is the domination

of the intelligent and educated, but numerically insignificant, population over the comparatively ignorant and uncivilized majority. Its defects were emphasized, though perhaps it was not extended, under Spanish rule. By this system the poor are often kept in debt to their masters or the caciques of their own people. Sometimes caciquism may mean but political service; and again it may exact the performance of field or household labor for a lifetime without pay. An instance: The wife of a Filipino peasant was sick, and needed medicines and the attention of a physician. The peasant, lacking money, went to the cacique or chief and engaged a physician and purchased remedies. The woman recovered. The husband was required to perform much field work for the cacique, to whom he had been for many years in debt for rice and clothes. He never thought to repudiate these obligations, the measure of which was defined by the cacique, nor to set forth for himself as an independent wage-earner, for he never caught up with his debt. From his children in the public schools this man learned that under the Government of the Philippines he was not required to bind his body for debt. Thenceforth he became a free man. It may be observed here that the intelligent and well-to-do Filipinos generally recognize in caciquism a great social evil; and they rejoice in the enlightenment of all the people, which is tending to render the institution unnecessary and impossible.

The general government of the Philippines is in

the hands of a body known as the Philippine Commission, whose members are appointed by the President of the United States. The Philippine Commission enacts such laws as are not in opposition to the Constitution of the United States and the act of Congress of July 1, 1902. The Philippine Commission consists of the President of the Commission, — the Governor-General of the islands being *ex officio* President, — and seven members, of whom four are Americans and three Filipinos. The Commission is a legislative body, and shares authority with the Assembly. The executive work is carried out by the Governor-General, Vice Civil Governor, and the Secretaries of the following departments, who are also members of the Commission: the Secretary of the Interior, the Secretary of Commerce and Police, the Secretary of Finance and Justice, and the Secretary of the Bureau of Public Instruction.

The first Philippine Commission was appointed in 1900. Since that period several of the Commissioners have been succeeded in office, though some members have served continuously. Four of the Philippine Commissioners are chiefs of departments. The departments of the Secretary of the Interior are the Bureau of Health, the Quarantine Service, the Bureau of Forestry, the Bureau of Science, the Bureau of Public Lands, the Bureau of Agriculture, and the Weather Bureau. The Department of Mines is a division of the Bureau of Science. The jurisdiction of the Secretary of Commerce and Police extends to

the following Bureaus: Constabulary, Public Works (Railroads), Consulting Architect, Ports, Navigation, Port Works, Coast and Geodetic Survey. That of the Secretary of Finance and Justice: Banks and Banking, Coinage and Currency, Internal Revenue, the city of Manila, the Treasury, and the Auditor's office. The Secretary of Public Instruction has jurisdiction of the Bureaus of Education, Supply, Printing, Prisons, and Cold Storage.

The supervision of the various bureaus, however, is not established by hard and fast rule under the jurisdiction of any particular officer of the Commission, since each department of the Commission cares for such bureaus as naturally come within its administration. Quite frequently development or change in any particular bureau has occasioned its change to another department. In this respect the Philippine Commission resembles the President's Cabinet, where each cabinet officer retains supervision of those bureaus which can be most easily administered by his department.

The first task the Commission found upon its arrival was the establishment of order. A complete judiciary system was founded by act of the Philippine Commission — 136 — on June 16, 1901, and put into operation. Now justice is administered as regularly and as fairly as it is anywhere in the United States.

“The ancient Spanish court system was tedious, dilatory, and costly. Litigants were held up awaiting justice for years, while the lawyers and court officials fed off

their substance. As a result of this system, people were very chary about going to court, and would, as a rule, much prefer to suffer injustice at the hands of the criminally inclined, to taking their causes before the judges. Now it is safe to say that court cases are settled on an average in one-half or even one-fourth the time consumed under the old regime.”¹

Under the provisions of the act of June, 1901, the judicial power of the Governor was vested in the Supreme Court of one Chief Justice and six Associate Justices, a Court of First Instance in every Province in which civil government is established, and a Court of Justice of the Peace in every municipality of the Province in which there is a Court of First Instance. The act also provides for the Attorney-General and Assistant Attorney-General, and a Solicitor-General; and it terminated the jurisdiction of military tribunals over civil cases.

Many important changes have been made by the Insular Government over former court methods. In the old Spanish days long-hand writers took down the proceedings of the court. The code of civil and criminal procedure is simple. As a rule, until the end of the Spanish sovereignty the entire judicial system, including the codes of civil and criminal procedure, followed the forms observed in Spain. Usually the judges of the court were Spaniards. While the laws were humane and wise on the whole, and were adapted to the state of society in the

¹ Henry C. Ide, former Governor-General.

Philippines, the codes of procedure and the personnel of the courts could easily be converted into obstacles great enough and permanent enough to make the people believe that the laws were not for their protection; and it is not improbable that this feeling added some strength to the general opposition toward Spain which finally appeared. There are now many American attorneys in the islands. Spanish will be the official language of the courts until January 1, 1911, but whenever in the opinion of the judges, in the Supreme Court and Courts of First Instance, the importance of the case may justify it, duplicate records will be furnished both in English and Spanish. This is a fortunate settlement of a difficult question, and prevents the resentment which would have followed had English been forced upon the people.

The Insular Constabulary is keeping magnificent order, and nearly all the towns maintain their own police forces. The liquor question is not serious in the Philippines. We have never seen an intoxicated Filipino, and a gentleman who has lived in the islands ten years says he has seen but two natives under the influence of liquor. "As a class they are the most temperate people I have ever observed. They have not fallen in love with American whiskey. Their drink, *vino*, an alcoholic liquor made principally from sugar, is intoxicating enough,—so much so in fact that the natives use it sparingly and seldom drink to excess."¹

¹ Henry C. Ide, former Governor-General.

The Philippine Constabulary plays an important part in the promotion of commercial progress and the education of the people. The Constabulary was organized in August, 1901, at the suggestion of General Luke E. Wright. The idea was to have an efficient patrol system of the entire islands, which could be cheaply administered through the use of native troops with American officers in charge. There are at present 250 officers in the Constabulary and 5,000 enlisted men. The total appropriation for the fiscal year ending June 30, 1906, was \$1,646,000; the total cost per man per year of the Philippine Constabulary is but \$329.25.

In some respects the Constabulary is the most unique military organization in the world. The men never carry rations with them, but buy all their food as they go through the country. At three minutes' notice a constabulary company can get under way to go on a campaign, and may not return for six months. The native trooper, as soon as he dons Uncle Sam's uniform, is absolutely faithful. Even the Moro Constabulary with their American uniforms have fought as desperately for the Stars and Stripes against people of their blood as any soldier in the field. It is hardly possible to tell by statistics what the Constabulary as an organization really has accomplished. Its work in the field is practically the least of what it does, but the following gives an idea of some of the field work for the four years to the end of June, 1905: Ladrones and *insurrectos* captured and surrendered,



FROM THE PRIMITIVE TO THE MODERN

Moro Constabulary recruits before enlistment — The same recruits
three months after enlistment — A crack Constabulary
company — Constabulary band at Tuguegarao.

9155; Ladrones and *insurrectos* killed, 2504; arms secured, 4288; stolen animals recovered, 5805.

Of course, it must be understood that the military work proper of the Constabulary has almost ceased with the pacification of the islands and the resumption of normal conditions. A useful work performed by this organization is the building of telephone lines. Upon December 31, 1905, there were in operation 2348 miles of telephones, a net-work extending all over the islands and informing the organization of everything that happens. Though the daily work of the Constabulary is not military, yet the system of administration is military. For the purpose of administration and discipline the Constabulary is a centralized organization. The director and four of the assistant directors are officers of the army detailed to report to the Governor-General. Fully four-fifths of the American officers of this organization have seen service in the army, regular or volunteer, some as officers and some as enlisted men.

The Constabulary is organized into companies of two officers and fifty men each, which are assigned to Provinces according to the area and the population, and the known character of the residents as to law and order. Some Provinces have one company, and others have as many as five. There are eleven unattached companies for general service in the districts to which they are assigned. Four of these are stationed in Manila at the Constabulary school; but fully one-half of this unattached force has been on

constant field duty since the organization of the service.

The officers of the Constabulary, as a rule, are young men, the great majority being under thirty, and of the entire two hundred and fifty only a dozen are over thirty-five. The pay of officers ranges from \$1100 for third lieutenant to \$1950 for captain. Extra pay is given for ability to speak and read the native dialect. For administrative purposes the Philippines are divided into five districts, each in charge of an assistant director. These officers have a large freedom of action, and are responsible for the order of their districts, and for the administration of the forces under them. They visit the various Provinces in their districts and advise with the provincial governor and local officials, and render them such aid as is needed, not only to keep order, but to prevent trouble. Everywhere the Constabulary are in touch with the leading citizens. Many acts of amazing bravery have been performed by the Constabulary, for the officers have always been conspicuous in leading the charges of their men. But, above all, the Constabulary is a peace organization; perhaps its greatest achievement was that performed by Colonel H. H. Bandholtz, who secured the surrender, in May, 1906, of the most desperate remaining outlaws in the Provinces, under no promise but that they should receive a fair trial at Manila.

The Philippines are to have a constitutional government. Under the act of Congress of July 1, 1902

(the Constitution, as it were, of the Philippines), it was provided that two years after the taking of the census the people should elect members to an assembly. About seventy-five members have been elected to this first Assembly, which will meet in July, 1907. When this body is in working order it will constitute the Lower House of the Philippine Congress and the Commission will act as the Higher, the latter body corresponding somewhat to the Senate of the United States.

Between six and seven hundred municipalities already enjoy complete autonomy, and forty Provinces choose their own governors. The purpose of the administrators is to teach the people the art of self-government through its practice, under careful supervision. This purpose is being fulfilled. Many thousands have qualified for suffrage, and intense interest is taken in the coming Assembly.

The Lower House, particularly, will afford a large measure of home rule. Attention should, however, be called to the fact that in the passage of its laws the Government of the Philippines is bound by the acts of the Congress of the United States. This feature has given rise to much dissatisfaction on the part of the American, Filipino, and foreign merchants, planters, Insular Government officials, and the general community. It is asserted that, inasmuch as the islands are self-supporting and maintain their own Government, they should be free to make such treaties and establish such larger trade relationships with other

countries as in their judgment will prove beneficial, or else that they should receive the commercial benefits of the United States flag. Great dissatisfaction has arisen in regard to the tariff laws passed by the Congress of the United States. By these laws duties amounting to seventy-five per cent of the tariffs between the United States and foreign countries apply between the United States and the Philippines. Under Spanish regime the people enjoyed a preferential market with Spain. That market has now been cut off, and it is affirmed that the failure to open our markets to Philippine products renders it impossible for the islands, under the present methods of agriculture, to pay the heavy tariffs and freights, and compete with other countries. Apart from the question of justice, it is certain that the tariffs have been a great handicap to rapid development. The relief tariff measure, as is generally known, passed Congress by a great majority, but was not reported on favorably by the Philippine Committee of the Senate. However, free trade with the Philippines would seem to be assured upon the expiration of the period provided by the Treaty of Paris, between the United States and Spain, ratified in Washington February 10, 1899. By that treaty it was provided that for the period of ten years the United States should admit Spanish ships and merchandise into the Philippine ports on the same conditions as the ships and merchandise of the United States.

Contrary to the general impression, no funds of the

United States go to the Philippines; they are self-supporting and maintain all their own public works and institutions. Several years ago, during the famine and distress following the insurrection, the Congress of the United States passed an agricultural relief bill appropriating \$3,000,000, which was wisely expended in the purchase of rice, carabaos, and other necessities. The islands do not, of course, contribute for the maintenance of the United States army in the Philippines, nor for the army transport service. The funds for the islands are obtained from customs, tariffs, taxation, and internal revenue. The last-named has afforded a happy solution of the problem of raising necessary funds. Great amounts are paid for luxuries, such as liquors and cigars. By applying the principles of internal revenue to these industries large funds have been obtained for carrying on public works. Indeed, so satisfactory has been the amount raised that the land tax for 1907 has been suspended, to assist the planter, without jeopardizing the funds necessary for the government administration.

Americans will be interested in the laws regarding the taking up of agricultural or mineral lands, and the obtaining of forestry concessions. Under the act of July 1, 1902, any *bona fide* settler may take up a homestead of sixteen hectares (forty acres). A company can make homestead on 2500 acres of public domain, provided it shows good faith by a *bona fide* occupancy of five years. The Forestry Bureau issues

licenses to cut timber; such licenses frequently cover large areas, and are granted from year to year; and a company may renew its license provided it meets the bid of the highest competing bidder. A similar rule prevails in some sections where a company, in addition to homesteading 2500 acres, may lease 2500 acres; and at the expiration of the twenty-year period the company will obtain title for another twenty years if it be not exceeded in its bid. The cost of a forestry license is a royalty on the timber cut. This royalty varies with the quality of the timber, but in the long run it is equal to a little more than five per cent of the value of the lumber cut. This is less than stumpage in the United States.

A mineral claim may be located 1000 feet in length by 1000 feet in breadth. Coal lands may be entered upon to the extent of sixty-four hectares for an individual, or one hundred and twenty-eight hectares for a corporation. The cost of coal lands is twenty-five dollars a hectare if located more than fifteen miles from a completed railroad or navigable stream, and fifty dollars a hectare for coal lands within that radius.¹

The limiting by Congress of the amount of public lands which corporations may take up to 2500 acres is not generally favored by Philippine officials, inasmuch as larger areas are necessary to support a

¹ Persons wishing to enter upon the public domain should address the Department of the Interior, Manila, P. I. United States postage rates apply.



DEVELOPMENT OF THE CONSTABULARY

Dispensary in Constabulary hospital, Tuguegarao — A corner of the
surgical ward — A company of Philippine
Constabulary

modern sugar-mill. However, a limited amount of private land can be had in the islands. The measure was designed to protect the people from capitalistic aggressions, and has some good features. In the old days of prosperity in the sugar industry there were but few sugar haciendas of over 2500 acres.

One may obtain in the Philippines an absolute and indisputable title to property. Land registration after the Torrens system, in vogue in Australia, has been put in force and is working admirably.

Several years ago the Commission repealed all the old Spanish revenue laws, which taxed the small dealers almost to the bankruptcy point, and established instead revenue regulations that make alcohol and tobacco bear the heaviest burden. The Philippine monetary system was based upon the Mexican dollar, and the currency fluctuated with the price of silver. The Commission wiped out the old system and introduced a new one based on the gold standard, which is as solid as the treasury of the Government. To do this it was found necessary to get rid of both the Mexican dollar and the Philippine peso, and this was accomplished in a remarkably short time. The Mexican dollar was passed out of the country as rapidly as possible by the people themselves, for the Commission placed a heavy tax upon that class of money. The old pesos were redeemed by the new Government.

Practically all branches of the Philippine Government are now under the Civil Service. All appointments, except the very highest, are made from lists

of eligible persons who have passed a satisfactory examination for the places, and promotions within the service are made upon the same basis.

One of the most important matters taken up by the Government was the investigation of tropical diseases, which is now being carried on in the laboratory at Manila. At this laboratory smallpox vaccine and various serums for the cure and prevention of diseases in man and beast are prepared. A serum preparation for the prevention of rinderpest, which threatened to exterminate the cattle, has proved wonderfully successful, and the disease has been practically stamped out. When it appears, here and there at infrequent intervals, a force from the laboratory proceeds to the herds infected and puts an end to the epidemic. By this means many millions of dollars' worth of valuable animals have been saved. Smallpox was prevalent before the American occupation, but since vaccination has been carried on to an extensive degree, the disease in its epidemic form has disappeared.

BIBLIOGRAPHY

For Acts of Philippine Commission, write Bureau of Insular Affairs, Washington, D. C., stating laws desired. For Acts of Congress, write Library of Congress, Washington, D. C., or your Congressional Representative.

Every one intending to enter the Philippines should closely read the Act of July 1, 1902 (Public 235), often called the Philippine Organic Act, — particularly Section 15, which limits corporations to 2500 acres of the public domain, and Section 75,

which limits all companies, except those that irrigate and consequently develop the entire holdings, to 2500 acres. (Any holding company may profitably run ditches for irrigation and drainage throughout the tracts of sub-companies.) Also read Act No. 1459 of the Philippine Commission, defining the powers of corporations. There is absolutely nothing in the spirit or letter of the laws to deter any corporation from entering the Philippines, and vast private estates are available.

A biased criticism of American policy is "Our Philippine Problem," by Henry Parker Willis, issued by Henry Holt & Co., New York, in 1905. Even the criticisms are out of date. "The Philippines and the Filipinos," by James A. LeRoy, Ginn & Co., Boston, 1906, is recommended. Special reports of all Philippine Government Bureaus are regularly issued under authority Philippine Commission, Manila, P. I.

CHAPTER VIII

THE FORESTS OF THE PHILIPPINES

OUTLINE OF TOPICS : Beautiful appearance of Philippine woods — Their great size, durability, and richness of coloring ; their qualities known in China and in Europe — Area and value of Philippine forests ; seas of tree-tops ; construction and cabinet woods ; ebonies and mahoganies — Opportunity for modern plants ; Government encouragement ; forestry regulations ; present developments ; bright outlook for lumbering industry — Forest products ; gutta percha ; dyewoods ; rattan, rubber, rubber vines ; opportunities for cultivation of domestic rubber and gutta percha — Bibliography.

PERHAPS nowhere in the world can be found so great a variety of wonderful hardwoods as in the Philippine Islands. Every observer is impressed with their infinite richness of coloring, the great size of the timbers, and their durability. Throughout the civilized portions of the islands are many remarkably old edifices whose interior finishings are of almost priceless native hardwoods. Huge mansions there are whose floors, glistening in superb natural finish without the aid of varnish, and reflecting one's image with the clearness of plate glass mirrors, reveal in their texture wonderful shadings of color and exquisite varieties of pattern. In the Cagayan Valley of Northern Luzon there is an old Spanish mansion whose floors are of huge bolted planks of different woods laid alternately, and

brilliant in their natural finish of golden straw, ebony-black, and claret-red colors. Soldiers who were in the Philippines during the early period of the American occupancy will remember the old Oriente Hotel (now the Constabulary Headquarters) in Manila, and the huge staircase of rich, shining, claret-red Tindalo. The Spanish appreciated the wonderful woods of the Philippines. In remote provinces one occasionally comes upon pieces of exquisitely carved furniture, and great doors and tables often made of single boards. Some of these exquisite hardwoods have been taken to England and Spain; they are much used in Southern China, particularly in Canton, in the making of marvellous wood-carvings; in Japan they are used in decorative cabinet-work; but they are comparatively unknown to Americans.

Either from the view-point of the artist and the nature-lover, or from that of the capitalist and the lumberman, the forests of the Philippines excel the forests of any other region of equal area in the tropical world. With a charm and grandeur peculiarly their own; with giant trees meeting in thick crowns eighty to one hundred and fifty feet overhead and so shading the earth that it seems twilight at midday; with a firm carpet of dry mould mostly clear of underbrush, but often occupied with great decorative palms and huge tree ferns as much as sixty feet in height, there is a glory in the vividly green-crested forests of the Philippines such as may, perhaps, be found nowhere else.

It is estimated by the Forestry Bureau of the Philippines that there are in the islands not less than forty million acres of commercial timber to replace the exhausted stocks of the world. The Bureau makes a distinction between wood land and timber land, the amount of wood land considerably exceeding the area covered by commercial forests. Of this great area less than one per cent is estimated to be under private ownership. Although the value of these woods has not been computed by "timber cruisers," it is believed to exceed two billions of dollars. Their natural yearly growth is computed at one billion four hundred million cubic feet. Fully ninety-nine per cent of this lumber goes to waste; millions and millions of feet of valuable hardwoods arrive at maturity and pass the period of their commercial value, to decay without vibrating to the woodman's axe.

Originally the entire Philippines probably were covered with forests. As a rule, the largest quantity of timber is found where there is the smallest population. For instance, on Cebú Island, which has the densest population, is little commercial timber; on the Island of Mindoro, where there is an average of but one and one-half persons to the square mile, are some of the densest forests.

With the exception of the pine forests of the mountains of Northern Luzon, and the huge *calentas* or Philippine cedar found throughout the islands, practically all the commercial woods of the Philippines are



NATIVE CANOES, HOLLOWED FROM SINGLE LOGS



NATIVES HAULING LOGS ON THE BEACH

hardwoods. Their texture is so close and their specific gravity so great that most of them, even when dry, will sink in salt water like so much lead.

Since the World's Fair in St. Louis (1904), where Philippine woods were largely exhibited, knowledge of the forests of the islands has greatly increased. As against 396 tree species in the Philippine forestry regulations at that time, 665 are now listed. The researches of the Government, and of commercial lumbermen as well, have not only brought about a better knowledge of Philippine woods, but have revealed the fact that the forests are far more extensive than they had been thought to be.

Philippine woods are not found in straight "stands" of any one species, as, for instance, pine, spruce, and redwood are found in the United States. The species are intermixed. On a stand of fifty square miles there may be as many as 400 varieties of trees, of which sixty or seventy varieties will be of merchantable size, that is, over fifteen inches in diameter. Even under these conditions the average of valuable timber to the acre is very great. Instances are known in which large tracts average 40,000 feet of merchantable timber — board measure — per acre. A lumberman operating on Negros Island has estimated that in some localities the timber scaled 240,000 feet to the acre.¹ Another lumberman has estimated that in a tract of 336 square miles the readily marketable

¹ This is probably a bit high, but it is possible, especially if there are a number of the largest trees on each acre.

timber ran from 10,000 to 13,000 feet — board measure — per acre; and this includes several cultivated mountain-valleys on the tract wherein there are few trees.¹ With the exception of the California redwood forests, the forests of the Philippines exceed in merchantable lumber per acre those of the United States. An average acre in the Rocky Mountain forests yields 1,000 to 2,000 board feet of lumber; in the forests of the Southern States 3,000 to 4,000 board feet; in northern forests, like Maine, Michigan, Wisconsin, 4,000 to 6,000 feet. A single redwood tree often yields as much as 100,000 feet of lumber. Acre for acre, there are probably no denser stands of timber than in the Philippines.

All the timber in the Philippines may be roughly classed as “construction woods” and “cabinet woods,” though frequently woods that would be deemed adapted to decorative purposes in any country where hardwood is less abundant are there used for construction purposes. Among the construction woods, probably the most universally used is that known as molave (*Vitex littoralis* Dene). *Molave* is, next to *lauan*, probably the most plentiful commercial lumber in the islands. The general appearance of the tree and the texture of the wood correspond more closely to those of the American white oak than any other tree in the tropical Orient. The logs come

¹ The discrepancies of these estimates are accounted for, in part, by what the lumberman would consider “merchantable” timber, in view of his logging equipment.

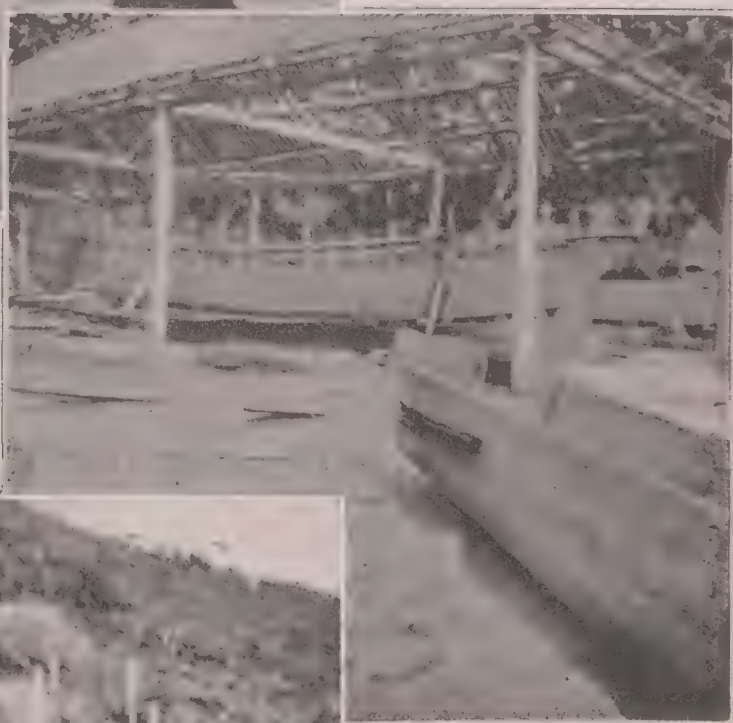
forty feet or more in length, and forty inches in diameter. The wood is easily sawn and worked, especially when recently cut. It yields magnificent planks, and can be used in various ways, principally for flooring. There is scarcely a dwelling in the Philippines in which molave is not used for posts. These are sunk three feet in the ground, in which case, although it may be damp or muddy, they will not easily rot. Upon them are built houses, convents, and churches, with more security than over walls of mortar and stone, for the posts are less affected by the earthquakes. Dried molave weighs about seventy-six pounds to the cubic foot, and consequently sinks in salt water. It is used for ribs of ships, for rollers in the old type of sugar mills, for joists, for beams, and is not affected by rot, by the *annay* (white ant), or by the wood-louse. In some parts of the Philippines are Spanish churches with molave beams over one hundred years old, that are in as good condition as when put there.

The molave belongs to the first group. It may be stated here that for the convenience of foresters in the old Spanish days, the woods were classified into groups, largely according to their value. This classification was used in determining the royalty to be paid to the Government on woods cut on Government lands. The classification was also adopted by foresters owning private tracts, and later by the American Government. Of the 665 native tree species listed in the islands, twelve belong to the

“superior” group, or most valuable trees; seventeen belong to the first group; eighty-six to the second; and the remainder to the third, fourth, and fifth groups, including fifteen species, largely gums and dyewoods, that are not deemed of lumbering value, and consequently are not to be felled. In addition to the trees so classified there are a large number which have not yet been entered on the Government forestry books, which, in the opinion of Mr. John Orr and other experienced foresters, have great commercial value.

It costs no more to lumber in the Philippines than it does in the United States. Take, for instance, *narra*, the finest Philippine mahogany. It can be put on the beach—in fact put into the mill—for less than ten dollars per thousand feet, board measure. To get it to Manila costs anywhere from four dollars to six dollars per thousand, and it sells for from one hundred and fifty dollars to one hundred and seventy-five dollars per thousand. The lowest grade, for which a stumpage¹ of seventy-five cents per thousand is paid, sells in Manila for forty dollars per thousand. The stumpage runs all the way from seventy-five cents to three dollars and seventy-five cents per thousand. A company cutting in the Island of Negros receives about seventy-five dollars per thousand for the average of all timber cut; and looking over their books, one sees that they pay for stumpage about

¹ Stumpage is the royalty paid on timber that is cut on Government lands.



NATIVE FILIPINO INDUSTRIES

A pine slab brought from the forest by the Igorrotes — Native ship-building plant in Southern Luzon — Spears of steel mined and forged by Igorrotes

seventy-five cents per thousand feet; that is to say, stumpage amounts to only one per cent of the value of the timber cut, which is less than anywhere else in the world.

One is apt to ask why it is, with the tremendous wealth of the Philippine forests, that capital, ever seeking investment, has not entered more largely into the Philippine field. The answer is simple: It is only lately that anything like modern methods have been adopted in the Philippine field. Any one who has seen six or eight carabao and about twenty men struggling all day to get a single stick of timber down to the beach a quarter of a mile away would not wonder why more has not been done in the Philippines. If these same men would use a cable they could haul the log down in five minutes. Sometimes, too, it takes a whole day to chop a tree eighteen or twenty inches in diameter with their narrow axes, when the same tree could be cut through in five minutes with a modern cutting implement. A big company in the Philippines could take a logging engine to a central point, haul everything to that point, and have a railway running thence to the mill.

The Government is lending every encouragement to the development of the lumbering industry. As already shown, the stumpage is the minimum, — much less in fact than the price of any timber on lands in the United States. Responsible parties intending to operate may be granted absolute concessions over

large areas for the period of twenty years. At the expiration of that period the concession is to be put up to the highest bidder; but the former owner of the concession is protected by the fact that it will go to him if his bid equals that of his highest competitor. However, with millions of acres of unworked forests, competition is improbable.

Philippine cabinet woods have suffered some drawback in the eyes of American furniture-makers, for the reason that the companies operating in the islands have worked on a small scale, and much of the lumber marketed has not been properly seasoned. Mahogany arriving from South America contains twenty-five per cent of moisture, which is extracted by seasoning down to about ten per cent, which is equal to that of seasoned Philippine woods. However, so great has been the demand in the islands that green wood is sent into the mills and immediately marketed, with all the way from thirty-five to seventy-five per cent moisture.

Lumbering in the Philippines is an industry in which Americans should be peculiarly interested. In the first place, it affords an opportunity for excellent profits. There is no braggadocio in the statement that American machinery in the forests is decidedly the best the world affords, and there can be no surpassing our lumbermen. All the genius of the Yankee has been directed to accomplish in the forests what to-day is specially desirable in the Philippines, and to discover the *modus operandi* which shall require a

minimum of labor. The American sawmill, with its auxiliaries, its loggers, its cables, its railroads, fulfils every requirement. There is no reason why the forests of the Philippines should not be subjected to modern logging methods with advantage. There are many millions of cubic feet of timber that should be cut in order to thin out the too dense growth. For instance, where there are three or four trees growing on the space required by one, the one so freed would put on more good wood each year than the four together.

The greatest loss in logging in the Philippines is in the handling of the timber. At the present time the natives hitch up a dozen carabao to a log, drag it through a trail three or four miles, and deliver it at the seashore. Thus they proceed until a fair number of logs have been collected, at great expenditure of time and money. Then come the chartering of some schooner, the dragging of the logs to it, the discharging and lightering, and hauling them up the *esteros*. And even then the logs are cut and sawn at a large profit.

Suppose, however, an American company comes to the Philippines and builds a modern mill where the lumber is; suppose the logs were cut by platinum wire heated by electricity, the felled logs grappled by a cable, drawn to the river, and driven to the mill; again grappled at the incline, taken to the saw, the cut timber kilned, and when ready for shipment put aboard the ocean-going steamer at the mill.

Forests can never be destroyed by fire in the Philippines as in the United States, and it is improbable that they will ever be subjected to the reckless lumbering that has been only too common in America. There are only eight steam sawmills in the entire city of Manila, and only three of these are equipped with thoroughly modern machinery.¹ Outside of Dalupaon, Southern Luzon, a small plant in Cagayan Valley of Northern Luzon, a plant at Santa Maria on the Island of Mindanao, and one on the Island of Negros, there is nothing in the way of lumbering that even approaches to modern methods.

In addition to timber, Philippine forests contain many valuable by-products, among them wild rubber, gutta percha, dyewoods, gums, varnishes, and rattan. The existence of the wild rubber vine has long been known among the natives in certain sections of Mindoro and Mindanao Islands. The area over which it grows is much larger than it was formerly supposed to be. It is now found in many islands. There are believed to be more than a dozen species of rubber vines, varying in size from the small *parameria* to a large vine which reaches a diameter of five inches and a length of 200 feet. When cut, the vines reproduce themselves from the roots with great rapidity. They have been seen springing up in a newly burned clearing where logs were still smouldering. An army officer who built a telegraph line from Davao to Cotabato,

¹ These are small plants as compared to those of the United States.



THE LUMBER INDUSTRY

Handing up a heavy tindalo stick — A lumber mill in Manila

Mindanao Island, is authority for the statement that it required a troop of cavalry to keep about half of the line cleared of the growing vines and creepers, among which the rubber vines were very noticeable. A test by the Bureau of Government Laboratories in Manila showed that the bark comprises about forty-four per cent of the rubber vine. Of the bark between nine and ten per cent is pure rubber, giving about four per cent of rubber content for the entire vine. Under the native method of tapping, a single vine has yielded five pounds of rubber. In quality this rubber has been compared to a similar rubber produced in Borneo, which brings between fifty and sixty cents a pound in Singapore. There is every reason to believe that this vine can be treated in a wholesale manner by a rubber-crushing machine, similar to that employed for sugar cane, which now successfully extracts the rubber content from the vines in South America, Mexico, and the Congo.

As is well known, the rubber is produced from a secretion in the bark of many species of vines and trees throughout the tropical world. The Philippines contain not only large quantities of wild rubber vines and many untested varieties of rubber trees, but they abound, in certain sections, in an even more valuable product, gutta percha, which is limited to them and to the vicinity of the Malay Archipelago and the Straits Settlements. Though the native method of tapping wastes the larger portion of the gutta percha (indeed, it sometimes kills the tree), yet as

much as 400,000 pounds of gutta percha has been exported in a single year by traders of Cotabato, Mindanao. There are vast areas in the Philippines rich in rubber vines and trees, and in gutta percha, which could be profitably worked. The soil and climatic conditions are well adapted to the cultivation of the domestic product. The Government has recently introduced seeds and seedling varieties. Young trees show surprising growth and vigor.

Among varnishes is *almaciga*, which is of unsurpassed value in the finishing of piano cases, to which it imparts a singular lustre and brilliancy.

BIBLIOGRAPHY

"The Forests of the Philippines," by George P. Ahern; "Rubber and Gutta Percha in the Philippines," Penoyer L. Sherman, Ph.D.; "Philippine Forests," Padre José Delgado.

Besides the annual reports of the Forestry Bureau of the Philippines, a number of monographs have been issued by the Bureau which will be of special value to lumbermen. Among these are Bulletin No. 4, "Philippine Saw Mills, Lumber Market and Prices, and Mechanical Tests of Properties and Uses of Philippine Woods"; Bulletin No. 5, "A Preliminary Working Plan for the Insular Lumber Company"; Bulletin No. 6, "A Preliminary Working Plan for the Public Forest Tract of the Mindoro Lumber and Logging Company." In addition, the Forestry Manual will be valuable. All these data sent free on request by Bureau of Forestry, Manila, P. I.

CHAPTER IX

HISTORY OF THE PHILIPPINES

OUTLINE OF TOPICS: Pre-Spanish period — Malay invasions — Effects of the Mohammedan invasion — Discovery of the islands by Magellan in 1521 — His death — Legaspi takes possession in name of Philip II of Spain — Legaspi founds Manila — His death — Salcedo, his grandson, continues the war — He routs the Chinese pirate, Li-ma-hong — His death — Summary of Philippine history to the American occupation — Prodigious labors of devout Spanish priests — Restrictive character of Spanish administration — Increase of population after the Spanish conquest — Trade hampered by taxes for revenue — Opening of Philippine trade to the world — Gradual estrangement between Spain and her colonies — The revolution of 1896 — Dewey's victory in 1898 — Dewey helped by Aguinaldo — Battle of Dajo Crater — Bibliography.

THE history of the Philippines naturally divides itself into three great formative periods: the traditional, or pre-Spanish period; the era of Spanish rule, from the discovery of the archipelago by Fernando de Magallanes (Ferdinand Magellan), March, 1521, to Admiral Dewey's victory over the Spanish squadron in Manila Bay, May 1, 1898; and the American period, which, though covering less than a decade, is assuredly, by reason of its encouragement to individual thought and initiative, destined to work greater influence upon the lives of the people than all the centuries gone before.

Early histories of the Philippines do not contain facts relating to the Filipino people, but are more of the nature of chronicles of the religious orders, and statements of the rules of successive Spanish officials. These begin, therefore, with Magellan's discovery. Centuries before that event the Philippines were inhabited by Malays, the forebears of the present people, who had then attained a degree of culture. At first the islands were inhabited doubtless by the Negritos, the aboriginal inhabitants, a race of pygmy blacks who then as now lived under most primitive conditions, subsisting on the flesh of animals caught in their snares or slain with their crude spears and bows and arrows. The pure Negritos are to this day destitute of culture. They are given neither to commerce nor the cultivation of the soil. Among the more advanced a clearing is burned in the forest, and potatoes and corn are planted. In a year or so the weeds choke the crops, and the entire community seeks another locality.

The history of the Malays as a distinct people is usually believed to be unknown. But they are generally accounted as much a separate stock as are the Mongolians, Caucasians, or Ethiopians. Had there been a means by which this people could have recorded its progress, it is believed that an uninterrupted race stock could have been traced to the earliest known periods of man's existence in the world. Fourteen or fifteen centuries ago the Malays of Java had been conquered by Brahmin Hindus from India, whose great monuments and temples still exist on

that island.¹ "Through the influence and power of the Hindus the Malay culture made a considerable advance, and a Sanskrit element, amounting in some cases to twenty per cent of the words, entered the Malayan language." Following the Hindus into the Malay Archipelago came the Arab priests and missionaries who supplanted Brahminism for the faith of Mahomet. Mohammedanism gradually made its way until on the arrival of the Europeans its frontiers were as those of the Malay race itself. When the Spanish came it was just gaining a foothold in Manila from the Southern Philippines.

It is natural to assume that at first the scattered bands of Negritos were located perhaps in the more convenient places which were situated advantageously on bays and waterways. Their numbers were, it is believed, greater than at present. By the Malays they were driven more and more to the interior. The original Philippine Malays, who are presumed to be the ancestors of the present Igorrote tribes, doubtless had been long in the archipelago when they were driven into the interior in consequence of a second invasion by people of their own race. At the coming of the sea-going Malays, those of the first invasion already had penetrated the remote interior of Luzon, and were enabled to defend themselves in impregnable positions. Driven to the interior mountains, there they have remained until the present time, possessing

¹ Some historians hold that the Malays themselves emigrated from Asia; the ruins mentioned, however, indicate Hindu workmanship.

no written language, given to spirit worship, and altogether of a culture most primitive.

A Philippine village when the Spaniards arrived was probably not greatly different from a remote native settlement at the present time. The dwellings were bungalows of two, three, or four rooms, of bamboo frames, thatched roofs and sides, and supported high above the earth on tall pillars. "The Tagálogs, Visayans, Pampangas, Pangasinans, Ilocanos, and probably other tribes, made use of an alphabet which can properly be called a Filipino national alphabet, inasmuch as with slight differences it was in universal use at that time, and was continued in use . . . up to ten years ago."¹ The alphabet was, historians tell us, composed of but seventeen letters. Various formulas, songs, and chronicles were burned upon the arrival of the Spanish, otherwise a more detailed account of this interesting period might have been obtained.

Evidences of contact with the outside world were numerous. In Tagálog the principal god was called Bathala, which is a word derived from the Sanskrit. The religion known throughout the islands (and which therefore might be called the national religion of the Filipino people) consisted in the worship of the souls of departed ancestors. Each family worshipped its own dead, who were supposed to have died in order to use their influence for the

¹ Dr. T. H. Pardo de Tavera, member of the Philippine Commission, and an able historian of his race.



AN INLAND SETTLEMENT

Showing the slight effect of Spanish contact

benefit of the living. When a noble died, it was the custom to sacrifice a certain number of slaves, that in his next life he might have a suitable retinue. Many Hindoo words were included in the dialects. The Spaniards found among the people much porcelain and china ware. Commercial undertakings were well understood in Luzon and the Visayan Islands. Companies for the transaction of business and the use of exchange, bonds, etc., were recognized. Money was unknown. Gold dust was a substitute, but barter was more common. Chinese weights were used.

The Mohammedan invasion¹ had left a strong impression. The Spaniards found Moro cannon in Manila and three other cities. In Manila there was a foundry where cannon were cast, in charge of a skilled native foreman, who continued his trade under the direction of the Spanish after they occupied Manila.

The people cultivated the soil and harvested crops; their implements for the hulling of rice were practically identical with those of the present time, though now modern machinery is coming into use. They manufactured articles from mother-of-pearl, and they made cutlery, spears, shields, and fishing implements. They manufactured jewelry of gold, silver, and copper, and were expert in the art of weaving and the making of laces and embroideries.

¹ Moro (Malay) priests and pirates had already begun to visit Manila from Mindanao, Sulu, and other Mohammedan Malay settlements.

When the Spanish came they found the inhabitants of Malay blood divided into town groups, each having its own government. The supreme governor of each community was a chieftain. Quite often different communities would unite and recognize some joint chieftain's authority over them. The population of some of the communities, as observed by Salcedo, was as large as seven thousand. In all these communities slavery was an accepted institution. The slaves were divided into two classes, — prisoners of war, and those who were bought outright or given in payment of a personal debt. In addition to the slave class and the chiefs, there were the warriors, called in Tagalog *macharlika*. When any man of the village owed money, it was the custom to offer himself as personal security, and serve as a slave to the creditor. Inasmuch as the system of hereditary sovereignty had to be supported by warlike power on the part of the chieftains, each tried by all imaginable means to increase the number of slaves in his community. Among the Tagálogs and Visayans it was customary for the rulers to form alliances and pacts.

Such were the Philippines at the time of the Spanish acquisition. The bulk of the people were intelligent, but were practically slaves. Freedom of thought or individual liberty of action were not encouraged among the populace, until the establishment of American courts of law and the present American public-school system.

The discovery of the Philippines by Magellan reads

almost like a magic tale from the Arabian Nights. The exploits of Columbus and the adventures and conquests of Cortés, Balboa, and others, had fired the restless cavaliers of Spain with the desire for the glory and great wealth that were to be obtained across the seas. Ferdinand Magellan, the Portuguese navigator, already famous, not being well rewarded by his king for his services, surrendered his citizenship and transferred his allegiance to Spain, at that time the jealous rival of Portugal. With Charles I. of Spain (the Emperor Charles V.) he signed a contract to seek the Moluccas or Spice Islands, declaring that they were within the limits of the Spanish domain. Magellan had already visited them, but the question of the right to conquer them was important, since Pope Alexander VI., in order to avoid disputes between Spain and Portugal, had given to Spain the right of conquest to the west of a meridian which was 100 leagues west of the Cape Verde Islands; and the following year the dividing line was removed by treaty to a meridian 370 leagues west of those islands. To Portugal were allotted all lands lying east of this imaginary line. Magellan, by order of the king, set sail from Seville, August 10, 1519, seeking to reach the Moluccas by a western route. His voyage was full of adventures. On March 16, 1521, he arrived at Homonohón (one of the Philippine group) near Surigao. He touched at other islands, including Leyte, and arrived in Cebú Island. He was killed in Mactan, having taken up arms against the

king of that small island. The survivors made the return voyage to Spain via the Cape of Good Hope, and thus first circumnavigated the globe.

A second expedition, under Loisa and Del Cano, left Spain in 1524 and touched at Mindanao *en route* to the Moluccas. In 1529 the emperor abandoned his claim to the Moluccas, which thereupon became the property of Portugal. Little attention was given to the Philippines, as it was thought they were very poor. However, a friar of the Del Cano expedition, having recounted to the king the wealth he had seen in Mindanao, an expedition was inaugurated, but it failed.

On November 21, 1564, an expedition set forth from Natividad, New Spain (Mexico), under command of Miguel Lopez de Legaspi, who was to be appointed Governor General for life of all lands he might occupy. It was only when he was upon the high seas and had opened the seals of the documents delivered to him that he learned that his objective point was to be the Philippine Islands and not New Guinea. On February 13, 1565, Legaspi arrived on the Island of Leyte, afterwards touching on Mindanao and Bohol, and on each island he formally took possession in the name of Philip II. of Spain. On April 27 of that year he arrived at Cebú, where he erected a fort and block-houses. On the first of June a small galleon was despatched to Mexico with information as to what had been accomplished.

The colonists had no great difficulties in establishing themselves, although the inhabitants, remembering

the repulse of Magellan, harassed them for a time. One of their early acts was the baptism of the daughter of a native chief, who was subsequently married to one of the Spanish soldiers. The chief himself was later baptized, and amicable relations were established from that time on between the Spaniards and the natives of Cebú. In the next year two nephews of Legaspi arrived from Mexico with further reinforcements.

Captain Martin de Goité, accompanied by Juan Salcedo, a grandson of Legaspi, and a youth of great courage and ability, sailed from Cebú with ninety arquebusiers and twenty sailors for the conquest of Manila. On their arrival they found the natives intrenched behind strong breastworks at the mouth of the Pasig River. The attack of the Spaniards was resisted with twelve cannon. The defenders were routed and the cannon sent to Panay Island, where Legaspi had already established himself.

On January 1, 1571, Legaspi organized the Government of Cebú, naming governors, treasurers, municipal councilmen, magistrates, constables, secretaries, and police. On April 15 he set forth in person to take Manila, having been informed by his grandson Salcedo of its fine location and natural advantages. The inhabitants fled before him, but Legaspi won over to his cause the rulers of the newly conquered territory. On June 24, 1571, with all due solemnity Legaspi founded the city of Manila (then called by the Filipinos Maynila) and appointed to rule over

it two *alcaldes* (governors), twelve councilmen, one *alguacil mayor* (chief constable), and other functionaries. A fort was erected on the present site of Fort Santiago, and battlements, as well as dwellings and churches, were built by the Spanish soldiers with some assistance from the Filipinos. The old Rajah Soliman of "Maynila" was baptized, the missionaries began to teach the gospel to the people, and Juan Salcedo and other captains set out on the conquest of the rest of the island. This was not a difficult matter, for although the word *pacificacion*, and not *conquista*, was provided in the "Leyes de Indias," peace, of a truth, already existed.

When Salcedo had set forth on his expedition throughout Luzon, his grandfather, Miguel Lopez de Legaspi, succumbed to the fatigues of his arduous life, leaving a name which will always maintain a prominent place in Spanish colonial history. He was buried in the Augustine chapel of San Fausto in Manila, where hung the Royal Standard and the hero's armorial bearings until the British troops occupied the city in 1763.

Juan de Salcedo had no great difficulties in bringing the people under the standard of Spain. When, upon the death of Legaspi, one Guido de Lavezares succeeded to the office of Governor General, the entire archipelago with the exception of the Cagayan Valley, which surrendered shortly afterward, was under the authority of the Spaniards. It was a very different matter, however, to subjugate the Mohammedan

Moros. The partial submission of the Sulu Archipelago to the Spanish sovereignty was not obtained until the end of the nineteenth century. Even since then the Moros, at times, have desperately combated foreigners. The fighting among these Mohammedan Malays, however, has been much confined to bandits, piracy and raiding being for centuries a recognized occupation on the part of the Moros.

In 1574, whilst Juan de Salcedo was in the north of Luzon, everywhere establishing the territorial dominance of Spain and extending the spiritual fields of the Church, he received word that the colony was near extinction by the incursion of a Chinese pirate named Li-Ma-hong, who had been outlawed by the Celestial Emperor. The Chinese fleet consisted of sixty-two armed junks having on board 2000 sailors, 2000 soldiers, 1500 women, and a large number of artisans, wherewith the Chinese adventurer, in line with the spirit of the age, dreamed to found a new kingdom. Salcedo, arriving opportunely from the region of the Ilocano people on the northwest coast of Luzon, easily routed and drove out the Chinese soldiers who had already entered the city. The salvation of the colony was attributed to divine intervention. Subsequently some of the Chinese junks were wrecked, and the Chinese escaping into the interior are said to have married among the Igorrotes. In 1576 Salcedo died at Vigan, and his remains were transferred to the ossuary of his illustrious grandfather, Legaspi, at Manila.

It would be impossible to give within the limits of a single chapter a chronological history of the Philippines from the days of Legaspi and Salcedo, when Spanish rule was first firmly established, until the present time. Having noted at some length the condition of the people at the coming of the Spaniards, and the romantic circumstances of the Spanish acquisition, let us content ourselves with the dates of a few notable events, and a brief review of the conditions and the spirit of the people up to the time of the American occupation.

The following summarization should be of value to us in our further consideration of the spirit of Spanish rule and the spirit in which this rule was accepted by the people : —

Some Notable Dates in Philippine History.

- 1521. Magellan landed at Butuan in the north of Mindanao Island; he raised the Cross on a small hill and celebrated Mass for the first time in the Philippines, taking possession of them in the name of the King of Spain.
- 1564. Legaspi sails from Natividad, Mexico, for the Philippines, the expedition being joined by Augustinian friars.
- 1571. Legaspi takes possession of Manila, establishing city government and erecting buildings.
- 1598. Creation of the Archbishopric of Manila and bishoprics of Cebú, Nueva Caceres,¹ and other cities.
- 1606. Attacks by the Dutch. Destruction of Dutch fleet in 1610.

¹ Often spelled Neuva Carceres.

- 1620. Moraga, a devout monk, obtains from Philip III. a pledge not to abandon the Philippines.
- 1635. Foundation of fort at Zamboanga, Mindanao, to check raids of Moro pirates.
- 1647. Thirteen Dutch galleons attack Cavite, destroy town, and reëmbark with Spanish in pursuit.
- 1664. Regular communication with Acapulco, Mexico, established.
- 1677. Missionary movements from the islands to China, Japan, and Siam. Martyrdoms of native missionary priests.
- 1700. By this time richly laden galleons from Philippines have long attracted the freebooters of the sea.
- 1762. English squadron of thirteen ships and six thousand men under command of Brigadier Draper successfully invests Manila.
- 1764. Arrival of despatches regarding treaty of peace with the English. Triumphal entry of Governor into Manila after English evacuation.
- 1765. Inauguration of direct communication between Spain and the Philippines via the Cape of Good Hope.
- 1782. Tobacco monopoly established.
- 1811. Publication of the first newspaper in the islands.
- 1835. Opening of port of Manila and encouragement to agriculture. Board of Trade organized.
- 1837. Organization of Bureau of Mines.
- 1840. School of commerce inaugurated.
- 1863. Creation of Minister for the Colonies. Earthquake kills four hundred persons in Manila.
- 1866. Prosperity of new era under representation in the Ministry. Reforms in penal code. Committees on agriculture and commerce.

- 1871-1873. Arrival of General Izquierdo; his announcement that he intends to govern the people "with a sword in one hand and a crucifix in the other." Workmen ordered to pay tribute and labor on public works. Consequent mutiny in Cavite.
1873. Establishment of telegraph lines in various provinces of Luzon.
1877. Philippines represented in Philadelphia Exposition; also in 1883 in Exposition at Amsterdam.
1887. Commencement of the making of Manila and Daguapan Railway.
1890. Telephone system inaugurated.
1896. Growing dissatisfaction against Spanish rule, and personal ill feeling between Spanish Government officials and natives culminates in organization of revolution. Sixty natives suffocated in single Manila jail. Execution of the patriot Rizal.
1897. Combined attack by six columns breaks revolution in Bulacan Province. Reinforcements arrive from Spain. Battles in Cavite Province. Publication of amnesty. Executions of Filipinos continued. Aguinaldo and other leaders deported to Hong-Kong by Spanish.
1898. Uprisings in Luzon. Aguinaldo's proclamation that Americans were friends sent in advance of American fleet. Victory of Admiral Dewey over Spanish squadron in Manila Bay, May 1, 1898. Blockade of Manila. Aguinaldo, introduced by American Consul-General at Singapore, is permitted by Admiral Dewey to land at Cavite with a view to coöperating on land with Dewey's fleet. Arrival of American Generals Merritt, Otis, and Anderson, with reinforcements.

June 23, Aguinaldo proclaims himself president of revolutionary government and commander-in-chief of army.

August 12, protocol of peace signed.

August 13, Manila surrendered and was entered by American forces.

September 15, revolutionary government meets at Malolos and elects Pedro Paterno, prince of Luzon and aspirant to a Spanish dukedom, as president of the Congress. American officials decline to recognize General Aguinaldo's unrepresentative government, as majority of Filipino people are in favor of American rule.

December 10, treaty of peace signed between United States and Spain. Islands pass to the United States.

1899. February 4, hostilities inaugurated and American army proceeds against revolutionary army.

1900. November 7, treaty for cession of islands not included in treaty of December 10, 1898.

1901. Arrival of Philippine Commission. Organization of Federal party.

1902, 1903. Era of rehabilitation. Freedom of thought and individual initiative guaranteed. Perfection of American forms of administration.

1903-1907. Constructive era, marked by great increase in general commerce; building of modern railways commenced in 1906. September, 1906, transport ties up to docks, Manila being only port in Orient where ocean-going vessels can transfer cargo directly.

As the reader has doubtless gathered, the ideals of the Spanish seem to have been to add new territory

to the Crown and new fields for the Church. Instances are rare of their having introduced innovations in the early days to benefit the people. But on the other hand, it must be observed, that cases of their having exploited the resources of the colony for their own benefit were few. Meantime the Church was everywhere busy erecting great cathedrals and baptizing converts. The labors of the devout padres were prodigious. Thus it happened that the Church steadily gained in material power, and finally came to be the determining influence in the government of the Philippines. Often the ambitions of Church and State were clashing. Indeed, the religious conflicts in Spain seem to have been mirrored always in the Philippines.

In commenting upon Spain's restrictive rule, one must in justice recall the fact that the ideals during the height of Spanish power were contrary to those of the present age. Manual labor was considered to lower one in social status, while the most beneficent aspiration, that of Christianizing a less developed race, was frequently clouded by the Inquisition. When at length the world emerged from its cruel religious struggles, the Spanish exchequer was impoverished, and the Government, whose attention was diverted from its great and fertile colony, allowed such latitude in the rule of the Philippine officials that the people were oppressed by them beyond endurance. In 1896 the populace broke out in open revolt.

It is not singular that, with her ideals, the efforts



SPANISH ARCHITECTURE IN THE PHILIPPINES

Public square, Bayombong, Nueva Viscaya — Church
on Romblón Island — Cathedral, and part of
shopping district, Nueva Carceres

of Spain were employed in the organization of administrative systems for the Philippines; it is but natural, too, that a policy of this sort, where the efforts of the rulers toward material development were few, should have resulted in restrictive rather than creative administration. Yet the policies enunciated in Madrid were theoretically excellent, although they took little account of the Filipino people themselves. The Supreme Court was early inaugurated, with the purpose of giving justice to all. An expedition — the first — of Franciscan monks arrived in the Philippines in 1577.

It is interesting to note the great growth of the islands in population since the Spanish conquest. In 1591, but twenty-six years after the arrival of Legaspi, a census gave a total population of 667,612, or much less than one-tenth of the present population. This estimate was obtained through the *repartimiento* system, whereby large grants of land, villages, and even portions of cities were by royal grant awarded, with their native populations, to captains, soldiers, and others, with the right to collect the *tributo*. As each native family represented so much income to the Spaniard, it is probable that the repartimientos were pushed to extreme limits, and the estimate may be taken as full. The system, a characteristic institution of Spanish colonization, was abolished early in the seventeenth century through the protests of the friars, although the policy was continued in many forms. For almost a century and a half after the

Spanish accession there was but little growth in population. The increase in the civilized population has been as follows:—

Year.	Population (civilized).	Interval (years).	Increase.
1591	667,612		
1735	837,182	144	169,570
1800	1,561,251	65	724,069
1845	3,488,258	45	1,927,007
1903	6,987,686	58	3,499,428

The relation between the growth of population and the development of agricultural production is so universally recognized as to demand no comment here.

Early in the era of Spanish sovereignty all sorts of expedients were adopted to raise revenues. Privileges and franchises were indiscriminately allotted, and the Government itself controlled many enterprises. The undertakings were not constructive, however, the purpose being to limit all trade to certain profitable channels. For decades but a single galleon plied between the Philippines and Mexico. Often, says a historian, a merchant wishing to ship a thousand dollars' worth of goods in this galleon would pay as much as five hundred dollars for the privilege. Not only were all exports (other than those destined for China or Japan) required to be carried in Government ships, limited in number and capacity, but even the kind, quality, and value of the exported merchandise were defined. In 1785 the king authorized the creation of a company to which was given a monopoly of all commerce and navigation between the

Philippines and other Asiatic ports and Cadiz. The Royal Philippine Company, organized in 1733, ended its life in 1835 without having achieved either commercial profit to itself or lasting economic benefits to the islands. Not until 1835 was Philippine trade opened to the world, and ships other than those of Spain permitted to have a share of Philippine commerce.

For centuries the colony had but little direct commercial communication with the mother country. The galleon trade with Mexico was brought to an end by the Mexican rebellion; and after the declaration of Mexican independence, August 23, 1821, direct commerce with Spain via the Cape of Good Hope was established.

The year 1835 is an important date in the history of the islands: in that year the port of Manila was opened to foreign trade.

The disaffection between Spain and her colonies is too vast a subject to be here dwelt upon. Suffice it to say that Spanish rule in the Philippines had tended to enrich the Church and Government officials enormously, while the condition of the common people remained stationary. The people were not considered, and all manner of cruel tributes were exacted from them.

The troubles which led to the Philippine revolution began as early as 1871, when General Izquierdo, a new Governor General, enforced both tribute and labor for the accomplishment of public works. Cash payment would have settled the problem; and with

a fair recompense for their work the people would doubtless have accomplished whatever undertaking was set before them. Owing to this order several uprisings, though with no apparently definite object, started at Cavite. Every one in authority, regardless of race, seems to have taken part in the exploitation of the people.

“The abuses committed by the *encomenderos*, the high-handed procedure of the mayors and treasury officials, as well as the oppression of the natives practised by the friars, caused uprisings among the people from time to time, . . . but these were promptly quelled by the strong arm of the Government and blotted out in blood and fire. Religious intolerance had also brought about conflicts of authority.”¹

The state of discontent became greater day by day, but the people remained in ignorance of the real cause of their troubles. Dr. de Tavera observes that the work written by Dr. Rizal, a Tagalog, brushed aside the veil. “It was a political novel in which were . . . presented in their true colors the sufferings of the people. The character delineations were all true to nature, from the young child to the old man, the obscure types of the lower classes, and . . . the cultured class.” The book was full of the poetry of nature, and “the attempt at caricature which the Spanish authors had always used in describing the people was eliminated.” The defects of the public administration, “the ignorance of the functionaries

¹ Hon. T. H. Pardo de Tavera, member of Philippine Commission.

and their corruption, the vices of the clergy, the incapacity of the governors," were made manifest. "The prestige which the friars had enjoyed — based only on the ignorance of the masses — crumbled away when the private lives and the immorality and viciousness of the friars were uncovered to the public gaze."¹

In short, Rizal's book and his martyrdom precipitated the revolution in 1896.

On March 6-9, 1906, occurred a desperate battle at Dajo Crater, on Sulu Island, between American forces and renegades. On this occasion, at which the writer was present, the entire native force, numbering between 1200 and 1400 Moros, were slain. This was the most complete defeat the Moros have ever suffered, and is, doubtless, the last large resistance to American arms which will occur in the Philippines.

The events subsequent to the American occupation are matters of recent history. How Admiral Dewey defeated the Spanish squadron May 1, 1898; how the American forces were at first assisted by General

¹ We should not, however, fail to do full justice to the great and unselfish work of the friars. The unfortunate misunderstandings, which arose largely through the fact that the padres, being in intimate charge of the people, seem to have been naturally and inevitably forced to act as agents or mediaries for the Government, are explained in our chapter "Christianity in the Philippines." In all fairness it should be observed that the people required a degree of tutelage, and the remarkable labors of the friars in the islands corresponded with their administration in California, Mexico, etc., where fortunately the outcome was attended with no religious controversy, though the Californian Mission Indians perished when the friars left that State, then a Mexican dependency.

Emilio Aguinaldo; how the American Government, finding itself in possession of the Philippines, did not feel justified in leaving the people to the mercies of the revolutionary army which represented a minority of the population, — these facts are all too well known to require recapitulation here.

BIBLIOGRAPHY

Authentic sources to which the inquirer may turn are numerous, but mainly in the Spanish language. "General History of the Philippines," Vidal, Madrid, 1887. "History of China," Mendoza, 1586. "Sanskrit Influence in the Tagalog Tongue," T. H. Pardo de Tavera, Manila (in Spanish). "Primer Viaje," Spanish translation by Amoretti, Madrid, 1899. "Archivo del Bibliófilo Filipino," Manila. The earliest historical account of the Philippines, the "Relación de las Islas Filipinas," was written by a Jesuit priest, Padre Pedro Chirino, and published in Rome in 1604. "Sucesos de las Islas Filipinas," Antonio de Morga, 1609. (This rare book may be seen in the library of Harvard College.) "Historia General de Philipinas," Juan De La Concepción, 1792. (The great eruption of Taal Volcano in 1754 is described on pages 345-350.) "Historia de las Islas Philipinas," Martinez De Zúñiga, 1803. Translation in two vols. by John Maver, London. "Kosmos," A. von Humboldt (Philippines, pages 404-409). "A History of the Philippines," David P. Barrows, American Book Company, New York, 1905. (This is a book that we can especially recommend.) "The Philippine Islands" (1493-1898), A. H. Clark Co. "Studies in Moro History, Law, and Religion," Najeeb M. Saleeby, Bureau of Insular Affairs, Washington, D. C. (This is of immense importance as showing the comparatively high grade of culture the Philippine Malays attained under Mohammedanism. The simplicity and justice of the Moro legal codes, often printed in strange dialects, refute the usual assertion that the Moros are "savages.") "Travels around the Earth," F. J. F. Meyen, Berlin. "The Philippines and their People," Carl Semper, Berlin.

CHAPTER X

AGRICULTURE

OUTLINE OF TOPICS: Agriculture the leading industry — Fertility of soil, and diversity of products — Introduction of exotic staples — The planting of coco-palms by the Spanish padres — Petty farms — The farmer and his implements — Coffee-culture, chocolate, broom, sorghum, tapioca, potatoes, upland rice, rubber, gutta percha, hemp, pepper, oils, indigo — Live-stock — Government experiment farms — Progress in agriculture — Bibliography.

“**T**ICKLE the ground in these islands,” said an old Spanish padre, “and great wealth springs up from the soil.”

Agriculture is and always will be the chief industry of the Philippines. More than ninety per cent¹ of the people cultivate the soil; for a series of years the agricultural products exported have exceeded in value ninety-five per cent of the total exports.

Unlike Japan, where the soil is not naturally very fertile and where the small proportion of arable land is much overcrowded, the Philippines present vast unsettled and uncultivated areas. In many regions one may wander for days through extremely fertile country, rarely seeing a native. The soil consists

¹ The census (see Appendix) does not give so large a proportion as this; nevertheless, it is true that almost all the population are engaged in agriculture.

mainly of decomposed volcanic rocks enriched with decayed organic matter. It yields luxuriant tropical and subtropical growths, either indigenous or exotic, and many products of the temperate zone, embracing about three hundred fibre plants of either commercial or local value; food-producing plants grow in great variety and profusion, as well as plants yielding valuable gums, dyes, oils, and medicines. Tropical fruits such as the banana, mango, orange, alligator pear, and scores of others are produced with slight or no effort; while corn, small grains, potatoes, tomatoes, and many other vegetables commonly grown in the United States respond readily to cultivation.

The agricultural products may be enumerated thus: hemp, sugar cane, tobacco, *copra* (dried meat of cocoanut), rice, corn of many varieties, sorghum, broom corn, Egyptian corn, Kaffir corn, cotton, including both the long staple cotton of commerce and a species useless for spinning purposes, but used for cushions, etc., peanuts, grown both for oil and forage, pineapples, the *camote* (a species of sweet potato, and next to rice the most widely grown and important food-plant in the islands), indigo, American sweet potatoes, Irish potatoes, nutmegs, cinnamon, pepper and other spices, cantaloupes, squashes, melons, castor oil, string beans and other beans, figs, blackberries, raspberries, strawberries (the last three in the higher altitudes), oranges of many varieties and some of exceptional flavor, almonds, marmalade plums, persimmons, pomegranates, tangerines, lemons, limes,

mangoes (the king of fruits), guavas, bananas (over fifty varieties, some of them unexcelled), cassava and arrow-root (both starch-producing), onions, garlic, asparagus, radishes, egg-plant, lettuce, cabbages, artichokes, endives, carrots, celery, parsley, gutta percha and rubber trees, rubber vines, millet, wheat, and forage grasses. There is an almost endless variety of native fruits, vegetables, nuts, and fibre plants, many of them extremely valuable.

Most of the products enumerated above are those which have been introduced into the islands by the Spanish. As a rule the products of the South of the United States thrive in the Philippines; and the elevated regions, having the climate of the temperate zone, produce amazing diversity. In some regions cotton and peanuts have become almost pests that seem never to die out, while guavas, once imported, may be found almost everywhere. Nearly all cultivated agricultural products also grow wild. The only important exceptions are rice, sugar, tobacco, and corn. Enormous crops of copra and hemp are gathered from the wild growths.

The success of the Spanish in introducing exotic fruits, vegetables, and other agricultural products, has induced the Government to carry on a variety of experiments. Many staples have been established, among them Egyptian cotton, yielding a superior commercial fibre. A pupil of Mr. Luther Burbank, the world-famous originator of new species of fruits and vegetables, is in the Philippines experimenting

with the grafting and improvement of several varieties of oranges; especially is he concerned with the introduction of "Mediterranean sweets." His efforts, so far, are meeting with much success. Orange-raising is already a somewhat established industry in Batangas Province. The future of orange-growing in various regions would seem to be most promising. Many of the wild varieties, although not commercially valuable, are exceedingly vigorous and make good grafting-stock. They are not troubled by pests or blight. The best native-grown oranges, which are unexcelled, bring very high prices in Manila. The most important crops in the Philippines are hemp, sugar, tobacco, and copra. As the future of the country and its people seems to depend largely on the cultivation of these great staple commodities, the conditions surrounding the cultivation and manufacture of hemp, sugar, and tobacco have been deemed of sufficient importance to entitle them to separate chapters.

The coco-palm (cocoanut) is believed to have been exotic, but, like many other products, it has taken to the soil with such a degree of vigor that it is almost universally regarded as indigenous. The Spanish padres impressed upon the people the necessity of planting it; in Southern Luzon and elsewhere vast forests of coco-palms set in precise rows attest the foresight of the thrifty priests. Incidentally it may be observed that cocoanut-farming is a highly profitable industry. From fifty to seventy palms are

grown to the acre, each tree yielding a yearly profit (net, there is little or no expense) of about one dollar (American currency).

Agriculture is conducted on a limited scale. Twenty-one per cent of all the "farms" enumerated by the census comprise less than eighty-five hundredths of an acre. These small parcels of land are cultivated by their occupants and contribute in no small degree to their living. Probably the average farm is less than one hectare (2.47 acres); including the vast haciendas established by the Spanish, the friars, and other foreign or mixed population, the average of all Philippine farms is only slightly more than eight acres. A number of reasons may be assigned for the limited degree to which the soil is cultivated; one of these reasons is, doubtless, that the Filipinos are an extremely gregarious people. The isolated farm-house so familiar in rural sections throughout the United States is unknown. These people live in communities. This is, perhaps, not merely a social custom, but is in some measure due to an inherited instinct for mutual protection against the robber bands that once rendered farm life in the American sense impracticable, while the great productiveness of the soil and the variety of crops that can be raised on a small piece of land have also contributed to limit agricultural development. The vast spaces of land between Filipino villages are, as a rule, wholly unpopulated and uncultivated.

A Filipino farmer is industrious up to the point of supplying his wants, but not beyond that; and he

lives along the measure of his days in the locality in which he was born, with few interests or ambitions outside the limits of his village. He is honest and will never repudiate a debt, even if it be, as it often-times is, unjust. He is obedient; and he will usually believe what is told him if it be presented in plausible manner. For this reason he often gets into never ending debt to professional money-lenders whom he may spend years of effort to repay. He is always contented until his burden becomes unbearable; then he will follow any clever and unscrupulous agitator who comes along. His methods of agriculture are exceedingly primitive. The plough he uses was borrowed from the Chinese. It often consists of the forked stick or crotch of a tree, with an iron "shoe" three or four inches in length. He does not generally appreciate the value of wagons in transporting his farm produce, and clings to the crude carabao sledge. Yet he is open to conviction, and when once the value of better methods is impressed upon him by the success of others in using them, he will readily adopt agricultural machinery. Readers of the Manila papers were surprised a short time ago to learn from a carefully prepared statement that no less than 7,000 reversible disc ploughs had been introduced in the single province of Negros Oriental, and were being used by the native farmers there. One Filipino planter recently rented from the Government a steam plough, paying for the use thereof one American dollar an acre, an approximate rental of forty-five dollars a day. Numerous other



PEASANT WOMEN IN THE MARKETPLACE AT TUGUEGARAO



THE FAMILY AND HOME OF A FARMER IN THE
SETTLED INTERIOR

instances might be given where the people have taken up modern labor-saving devices. In passing from this topic it may be observed that the Filipino farmer is a home-owner, and that eighty per cent of the farms in the archipelago are owned by their tenants. Only sixteen per cent of them are farmed out on shares.

Coffee-culture is, we think, an industry that should attract the attention of American planters. Coffee was growing in the islands as early as 1808. In 1860 its culture was taken up by an enterprising native governor of Batangas Province. The industry in that province grew rapidly. In 1883, after supplying local wants, no less than 16,790,000 pounds were exported. However, in 1889 a coffee blight destroyed the plants, the natives knowing no method of fighting plant parasites, so that in 1906 \$80,000 worth of coffee was imported. Much fine coffee is raised in the Philippines in districts unaffected by blight. This is particularly true of the high mountain regions of Northern Luzon and around Lake Lanao, on Mindanao Island. The Benguet (Luzon) coffee is now being exported to Spain and China in considerable quantities at high prices. Some is being sold in Manila, and is preferred to the best imported coffees.

Owing to its fine quality the demand for Philippine coffee will always be greater than the supply. The variety in Batangas affected by blight was the Arabian coffee. In 1880 it was practically wiped out in Java, which as a coffee country resembles the Philippines. Java, through the efforts of the Holland scientists, has

recovered from the blight. Near San José town, Batangas Province, is a grove of Liberian coffee, a variety that has never been affected by the blight. It is an equatorial species, and does not grow above one thousand feet in altitude. In Java, where it is grown in quantities, this variety brings eleven and three-fourths cents per pound wholesale. In 1903 the Government introduced Brazilian coffee in Batangas Province, which is fruiting splendidly, although Arabian trees in the vicinity are infected. Under ordinary conditions a coffee plant six years old will yield at least three pounds of coffee of the most desirable flavor. The trees are planted six feet apart. Igorrote labor can be gotten in Benguet for from five to ten cents a day. The people are strong, good-natured, and can be handled. Notwithstanding the poor treatment given to the drying of the berry, Philippine coffee usually has a marvellously delicious flavor and aroma.

Another orchard industry that should appeal to planters is the cultivation of cacao (chocolate). The tree, originally introduced from Mexico, is cultivated in every portion of the Philippines except the highest mountain districts.¹ It seems to grow best in a hot,

¹ Unlike coffee, however, cacao is not a tropical cosmopolite. The trees will grow almost anywhere in the archipelago but will not produce profitably in many regions. Warmth, shelter, humidity, and equable, abundant rainfall are needed in a superlative degree to produce large fruiting pods of cacao. The requirements of cacao in the Philippines are restricted to the sheltered valleys of the eastern coasts from Southern Luzon to Mindanao. This area in the Philippines, and the African gold coast, are the only remaining

steamy climate. As a whole the cacao-tree needs more care than the natives give it, and though the Philippines are singularly free from the blights, mildews, and cankers that have played havoc in other tropical countries, it is a rarity to see a well cultivated orchard. The tree does not need any fertilizing, but unless the orchard is pruned and looked after, it rapidly goes into jungle. We have seen an orchard that has borne heavily for thirty consecutive years. Comparing the cacao orchards of the Philippines with those we have seen in tropical America, we should say the former are naturally more vigorous.

The growing of broom corn, Kaffir corn, and sorghum, all of which have been introduced within the American occupation, will prove very profitable. The only region we have ever seen which exceeds the wonderful Imperial Valley of the Colorado Desert in the production of these staples is in the Philippines. Owing to the success of broom corn a company has already ordered the machinery for corn brooms and brushes to fill the local demand. Kaffir corn has great drought-resisting powers and is rich in nutritive qualities. Irish potatoes can be raised profitably in many sections, considerable quantities of them realizing regions suitable for any considerable expansion of the industry. The world's requirements are above three hundred million pounds, and are yearly increasing, and the supply on hand would last but perhaps two months were production suddenly stopped. Philippine cacao, crude, untreated, and sun-dried, brings from one-fourth to one-third more in the local markets than the beautifully processed cacaos imported from Singapore, which supply nine-tenths of the demand.

the farmer from three and a half to six dollars per bushel.

One should not assume that, because the islands can produce amazingly of many varied products, these will not command a good price. Take tapioca, for instance, — a most neglected source of wealth. The manihot plant, from which it is produced, grows around the door-yards of the native homes about as plentifully as flowers around American homes. But one never sees a plot even one-quarter or one-third of an acre in extent. The vigor of the plant is marvelous. If a cutting is stuck in the ground it will make a successful fight for life in conflict with weeds, drought, and neglect, and produce an excellent crop of tubers. About \$1,700,000 worth of tapioca is imported annually into the United States. The crude product is worth \$45 (gold) per ton.

Upland rice requiring neither irrigation nor flooding could be cheaply and easily cultivated by a progressive concern provided with mules and traction engines. The carabao could not compete with engines. Besides saving the importation of rice from foreign countries, laborers on the plantation could be supplied with their staple food, while the surplus would meet a ready market in Manila. It is of interest to observe that all countries which depend on rice raised by flooding are periodically visited by famine, with cholera usually following in its trail.

The cultivation of rubber and gutta percha is an industry that should, in time, be most profitable to the

islands. Rubber-trees, most of them untested varieties, are wild in abundance throughout Mindoro, Mindanao, and in parts of Luzon, the Sulu, and other islands. Two tested species and more than one dozen untested species of the wild rubber vine are common, being especially numerous on Mindanao and Mindoro. The Japanese Government is successfully treating some probably identical species on the island of Formosa. Gutta percha, as is well known, is found in abundance in the Southern Philippines. The gutta percha used in marine insulation is more valuable than rubber, the best variety being quoted at \$2.25 per pound.¹ The exports of this product, as yet undomesticated, from Cotabato, Mindanao, have been for the several years recorded as follows:

1902	.	.	.	.	.	.	.	.	.	328,000	lbs.
1903	.	.	.	.	.	.	.	.	.	359,000	"
1904	.	.	.	.	.	.	.	.	.	236,094	"

With the complete restoration of peace conditions, shipments are increasing, and it is expected that 1907's shipments will be very large indeed. Exports of wild gutta percha to the extent of 400,000 pounds have been recorded from Cotabato alone. The figures above given include wild rubber and gums of inconsiderable value at present.

The favorable conditions for rubber-culture in the Philippines are evidenced by the amazing vigor with which trees planted by the Spaniards for shade purposes, as well as those but lately planted at the

¹ Quotation furnished by the Wm. A. Alden Company, of Boston

Government experiment stations, have grown. We have seen a true Para rubber-tree in the Philippines that at fifteen months from the seed had attained a height of seventeen feet; and such records could be readily duplicated.

Until late years it had not been proved that the domestication of rubber was profitable; but rubber cultivation has now passed the experimental stage. The recent sale in London of \$74,000 worth of plantation rubber in a single day demonstrates that this new contestant for commercial favors is to be taken very seriously. Altogether, there are believed to be more than 100,000 acres of rubber in cultivation in the tropical world at the present time. More than 70,000 acres are under cultivation in the Straits Settlements, where cultural conditions are very similar to those of the Philippines. Rubber cultivation, too, has been successfully undertaken in Java, as well as the domestication of gutta percha, a product that is limited to the Malay Archipelago.

A bulletin of the United States Agricultural Department announces the conclusions of the Department that a large proportion of the rubber needed in America could be raised in the Philippines. No other country puts India rubber to so many uses as does the United States, which consumes one-half of the product. The total imports of crude rubber into the United States during 1906 amounted to about sixty million pounds, valued at \$50,000,000. The demand for the highest grade of rubber for automobile tires

has considerably raised the value of rubber, and it is believed that, notwithstanding the opening of new fields of supply, the time must come when there will be a real shortage of the commodity. To encourage the planting of rubber the Insular Bureau of Forestry introduced seeds from Singapore, which were planted at the experimental farm near Zamboanga. The average growth of the nursery stock was eighteen inches in fifty days from planting the seeds. Young plants are available to settlers. Two plantations of Ceara and Castilloa rubber have been started on the island of Basilan, south of Mindanao.

Worthy of attention is the cultivation of maguey or Sisal hemp, which is allied to the century plant. It differs from Manila hemp, which belongs to the banana family, and is but two-thirds as valuable. Considerable quantities of this plant have been introduced into the Philippines from Hawaii, and some from Yucatan, with much success. The Hon. Dean C. Worcester, Secretary of the Interior, and Mr. A. O. Zinn, also of the Insular Interior Department, have thoroughly investigated the merits of Sisal hemp, and are most enthusiastic.

Maguey possesses some advantages over Manila hemp. It grows on a rocky soil where scarcely any other plant will grow. "The plants grow well even in fissures in bare limestone rock. I have seen splendidly developed maguey plants growing in pure beach sand on the coasts of Mindoro and Tablas [islands]."¹

¹ Dean C. Worcester.

It requires absolutely no cultivation except when first planted. Even then the cultivation is probably less than that needed for any other commercial product. It withstands prolonged drought admirably, the fibre not being at all affected by it; and being of a short and stocky nature it is not whipped by severe winds nor uprooted during hard typhoons. Moreover, it is economically treated by machinery. A thoroughly modern maguey stripping machine or raspador, with a capacity of 150,000 leaves per day, may be installed at a cost of several thousand dollars, while the old-fashioned machines that yield 100 pounds of cleaned fibre a day may be had for one hundred dollars. Owing to the fact that maguey grows in the most unfertile regions, where the people must work to live, adequate labor can be secured. To-day there is not a province where some varieties, first introduced from Mexico, are not found growing wild.

A pepper yard would prove a fascinating and remunerative employment, furnishing a necessary mental and physical stimulus, without requiring any great exertion. Pepper affords wider opportunity for extended culture, on account of its more general use, than any other vegetable condiment in the Philippines. Commercial pepper grows splendidly, but is usually neglected. If cultivated with the same care that is devoted to the "buyo," a pepper widely raised for its leaves, which are used for chewing purposes, it is certain that in the third year every vine of the true

commercial pepper could yield twelve ounces of berries and produce a net revenue of not less than \$200 per acre.

There are many native products and vegetable oils, such as sesamum, which are consumed not only by the natives, but meet with a general market throughout the Orient. These could be most profitably raised and treated by American machinery. The sesamum, which is an oil seed, produces about forty-five per cent of a bland odorless oil much esteemed among Mohammedans, who are forbidden by their religion to use the fat of unclean beasts, such as the hog. It keeps excellently in the tropics and blends readily with other oils, while the residual cake is very valuable as cattle feed and as a nitrogenous fertilizer. Sesamum is cultivated throughout the country in an indifferent way, yet it thrives splendidly. The seeds are treated crudely. India last year exported more than £1,000,000 sterling worth of sesamum oil, which was less than one-fourth the amount reserved for home consumption. A modern factory would undoubtedly pay in the Philippines.

Indigo-culture at one time gained great proportions in the islands. Much was grown on the northwest coast of Luzon, in the region of the Ilocano people; and the large and substantial city of Vigan was almost entirely built up by the indigo trade. Owing to the adulterations of the product by the Chinese middlemen the reputation, and, consequently the demand, for Philippine indigo fell away. Natural conditions

and its profitableness render the industry one well worth looking into.

We have not mentioned any of the amazing varieties of valuable native fruits and vegetables, since the cultivation of these is not understood by the American who has not yet enjoyed a visit to the islands. It would require an inventory of almost all the tropical and semi-tropical products of other countries, besides a long list of indigenous products peculiar to the Philippines, as well as of many temperate or semi-tropical growths introduced from Asia.

The raising of live-stock has always been a considerable industry in the Philippines. In old Spanish days cattle were raised for their hides alone. The principal animals are horses, Indian and Chinese cows, — the latter of which compare with the cattle of any country, since for centuries their breeding has been the subject of much care by the Chinese, — carabao, sheep, swine, and goats. All live-stock, with the possible exception of the carabao, has been introduced by the Spanish or the Chinese. Except sheep and goats, all are found wild as well as domesticated. The horses — probably introduced by the Spanish — are small, vicious, and wiry. They are but little affected by hardships and abuse, for the people have no idea of the proper treatment of a horse. Australian horses thrive to some degree, but American horses seldom become acclimated. A cross between an American, Chinese, or Australian horse and a



A COCOANUT GROVE



BOATLOAD OF RICH FRUITS, SOUTHERN LUZON

native pony produces an excellent animal of both stamina and stature.

Pony-racing is a popular diversion and some fast runners are exhibited. In the old days fights between stallions were often had, and a charge was made for admission. The carabao, or water buffalo, is essential in the boggy, inundated rice fields. This animal, found throughout the Orient, is extremely slow, and can be supplanted in most branches of agriculture. With proper quarantine measures the possibilities of stock-raising will become immeasurably increased, for the vast pastures of the uplands contain millions of acres of rich grass.

The ravages of rinderpest, which in 1902 and 1903 destroyed ninety per cent of the carabao, and of surra among horses at the same period, is comparable to the alarming spread of Texas fever among the herds of the South a few years ago. The Government is now instructing the people as to the quarantine of sick animals. On many small and isolated islands, as Romblon and the Batanes, a stock-raising group, no cattle were lost. During the pest a negro soldier, honorably discharged, quarantined 400 carabao at the headwaters of a mountain stream. He did not lose a single head. They advanced in value from \$8 and \$10 to \$100 and \$125 each. The carabao are now greatly increasing, and in a few years the supply of work animals will doubtless be as large as formerly.

Next to agriculture in importance, from the viewpoint of persons actually engaged therein, are the

fisheries; but including latent resources, the next to agriculture is perhaps the product of the forests.¹ It should be here explained that many farmers are also fishermen. It is rare that a native in the provinces confines himself exclusively to any one pursuit.

A useful work has been undertaken by the Government in the establishment of agricultural experiment farms, which, under the direction of practical superintendents, are scattered throughout the archipelago. The field embraced is varied. New and valuable plants, vegetables, and fibres are introduced with a view of testing their commercial value; indigenous products are improved; demonstrations are given of the use of farming implements and other mechanical devices; valuable live-stock is imported and lent for the purpose of breeding with native stock. Provincial fairs, institutes at which skilled and practical scientists give free lectures in Spanish, and street parades and exhibits, are among the means through which the theory and practice of agriculture are expounded. This work is bringing good results. The Filipino farmer in many sections is preparing to handle enormously increased crops; and a great deal of credit for the progressive ideas which he has gained is due to the Bureau of Education for the establishing of agricultural schools.

In many regions the native farmers are taking to improved methods and frequently adding to their

¹ Not much lumber is shipped, but the value of the standing timber is second only to what may be obtained from agriculture.

effectiveness. A native of Negros, a planter, whose carabao had died, recently purchased two petroleum motors. As it was late in the season, he placed an acetylene gas lamp in front of each motor, and worked his ploughs continuously day and night, with shifts of men. Possibly this is the only instance on record where ploughing has been done by gaslight. The farmers of Panaqui in Tarlac, called the "Kansas of the Philippines," lately placed an order for two carloads of modern machinery to swell the rice crop of the new branch railroad there. Complete outfits for handling rice have been shipped to Laoag, a seaport town in the extreme northwest of Luzon; and a small modern sugar mill is being built in Calasiao, in Pangasinan Province, where the native planters have also installed a steam thresher, a steam clipper for cutting the beard off the rice, and a newly invented hulling machine.

BIBLIOGRAPHY

For those who desire further information upon agriculture in the islands we especially recommend the annual numbers (in book form) of "The Manila Daily Commercial Bulletin." These present in readable form an abundance of the most accurate and practical information obtainable. "The Far Eastern Review," a monthly also published in Manila, may be warmly recommended. Interesting, though frequently very technical, data and pamphlets may be obtained from the Bureau of Insular Affairs, Washington, D. C., and the Bureau of Agriculture, Manila, P. I., which latter publishes special brochures devoted to the cultivation of the various products. The following, all issued by the Bureau of Public Printing, Manila, are of value:

Bulletin No. 59, being "A List of Agricultural and Fibre Plants"; Farmer's Bulletin No. 3, "Modern Rice Culture"; Farmer's Bulletin No. 7, "Report on Introduction and Distribution of Seeds and Plants"; Farmer's Bulletin No. 8, "The Cocoanut"; Bulletin No. 5, "Soil Fertility in the Philippines"; Farmer's Bulletin No. 2, "Cacao Culture"; Press Bulletin No. 6, "The Tamarind"; Farmer's Bulletin No. 4, "Commercial Fibres of the Philippines"; Farmer's Bulletin No. 11, "The Jute Industry"; Farmer's Bulletin No. 1, "A Primer on the Cultivation of Sugar Cane."

"Cacao; a treatise on the cultivation and curing of Cacao," by J. H. Hart; "Coffee planting in Southern India and Ceylon," by E. C. P. Hull; "Coffee, its Cultivation and Commerce in all Countries," by C. G. W. Lock; "Le Tabac," by A. Lauret; "Le Café," by Henri La Compte; "Tropical Agriculture," by H. A. Nicholls. "The India Rubber World," New York, is a standard monthly on all phases of rubber culture, trade, and manufacture.

CHAPTER XI

MANUFACTURES

OUTLINE OF TOPICS: Manufactures in the modern sense undeveloped — Household industries; the weaving of beautiful cloths; tobacco manufacture — Manila the manufacturing centre — Shipbuilding — Brewing — Modern factories in Manila — Native mechanical industries: cigars and cigarettes; sugar; cordage; indigo; hats; iron foundries; machine shops, etc. — Aptitude of the natives as machinists — Percentage of the people engaged in various industries — Abundance of good coal — Gold and other ores — Bibliography.

INDUSTRY, as the Occident interprets it, is as yet almost undeveloped in the Philippines. Manufacturing enterprise has not progressed much beyond the making of those articles that supply the few and simple wants of the people. It has been practically confined to sugar, tobacco, copra, vegetable oils, indigo, and other agricultural commodities, and to the manufacture of such crude implements as have made even existing methods of agriculture possible. Until the present era there has been little to awake the Filipino to the value of labor-saving machinery. The restrictive policy of the Spanish, and their disinclination to permit the natives to engage in industry, have contributed to limit the needs of the people.

Outside of Manila and one or two other large ports modern industrial plants are unknown. For centuries, however, household industries and the making of ploughs, ships, sledges, knives, etc., have prevailed. Cloth-making, the principal household industry, antedates history. When Magellan discovered the islands the natives had long been engaged in the manufacture and sale to foreign Oriental traders of cotton goods, cloths, and garments of all sorts, embracing many valuable and exquisite weaves of the distinctive Philippine textiles manufactured from Manila hemp, maguey, and pineapple leaf. The fabrics, we are told, were of much beauty in design and coloring, and possessed a lustre rivalling that of silk. From times of great antiquity the Filipinos had bought of the Chinese traders silk yarns, which they introduced into their fabrics.

A Spanish colonist, Don Francisco Urrez, in a report addressed to the directors of the Philippine Company, in 1802, thus pictured the condition of native industry, a description which is true to-day in many of the provinces :

“The Philippine Islands from time immemorial were acquainted with, and still retain, the species of industry peculiar to the country and adapted to the wants and needs of the natives. If an attempt were made to enumerate the quantity of mats, handkerchiefs, sheeting, and a variety of other cloths manufactured in only a few of the provinces, immense supplies of each kind would appear, which give occupation to an incalculable number of looms indiscriminately worked by all classes in their

own humble dwellings, built of cane and thatched with palm leaves. They spin and weave without any other instruments than their hands and feet, aided only by the coarse and unsightly looms they themselves construct with scarcely anything else than a few canes and sticks."

The goods thus crudely manufactured, however, excited the admiration of travellers. Tomás de Comyn, the Spanish historian, in his work, "State of the Philippines," written about 1810, says:

"Their natural abilities in the manufacture of all kinds of cloth, fine as well as coarse, are really admirable. They succeed in reducing the harsh filaments of a palm tree [?] ¹ to such a degree of fineness that they afterwards convert them into textures equal to the best muslins of Bengal. The beauty and evenness of their embroideries and open work excite surprise; in short, the damask table-cloths, ornamental weaving, textures of cotton and palm fibres intermixed with silk, clearly prove how much the inhabitants of the Philippine Islands, in natural ability and dexterity, resemble the other people of the Asiatic regions."

Practically all the manufactories of modern type are in Manila. Raw products are readily transported from the provinces by the large coastwise fleets, and find in the capital city ready facilities for their conversion into manufactured goods. Since the American occupation factories have steadily increased, being supported by foreign and by native capitalists, who seem to have been considerably stimulated through contact

¹ The historian probably had in mind some of the numerous native fibres, which, however, are not obtained from palm "trees."

with American enterprise. To-day it is estimated that almost seventy per cent of all the factories, both crude and thoroughly modern, are located in Manila, while Cavite, a suburb but ten miles distant, ranks next in the value of its output.

The chief industry is the manufacture of cigars, cigarettes, smoking and other tobacco; the product being twenty-five per cent of the total values of manufactures. Altogether there are about twenty thousand tobacco operatives, more than half of whom are women. There are at least one hundred and eight tobacco-manufacturing establishments, of which the largest, located in Manila, employ many thousand hands. Wages have risen considerably since Spanish days: the daily earnings of cigar sorters have increased from forty cents to one dollar; cigarette packers from twenty-five to fifty cents; cigarette makers from twenty to seventy cents; cigar makers from forty cents to one dollar.¹ A like increase is to be found in the earnings of practically all other workers in Manila, and to a great extent in other centres. The average salary of accountants has risen from fifteen to forty dollars per month; iron moulders from 75 cents to \$1.75 daily; saddlers from forty cents to one dollar; musicians from \$1.25 to \$2.50; brick-masons (foremen) from fifty cents to one dollar and others from thirty to fifty cents; while cabinet-makers now receive two dollars as against one dollar in Spanish times, — a foreman cabinet-worker receiving \$2.50 per

¹ Census of the Philippine Islands.



TYPES OF FILIPINO CHILDREN

Girls of Tuguegarao smoking the huge native cigars — Igorrote boys operating a ferry — Cagayan Valley natives in home-spun garments — Cagayan children smoke their cigars

diem. It is probable that these figures — which, of course, do not refer to the extremely low-priced field labor in the provinces, but to factory-work in the cities — have considerably risen since the census, for the workers rapidly increase in efficiency under expert direction; moreover, their wants are greater than they were in Spanish times, since every man may rise by the result of his own efforts, while the means of satisfying their requirements have been largely afforded them.

Shipbuilding, which is carried on throughout the archipelago, ranks second. It is an industry in which the people exhibit a degree of mechanical skill. We have seen some unsurpassed native-built craft in the islands. The artificers are often said to be so very imitative that they will reproduce in the copy the defects existing in the model, yet this is not exactly true. It usually applies to the unskilled workmen or navigators, with whom a lack of experience has laid no basis for originality. The historian De Morga, whose description of the inhabitants, their manners and customs, was published early in the seventeenth century, mentions that “there are many natives skilled in building any sort of ship,” and that many were skilled in carpentry.

The brewing of liquors comes third, with a value of one-eighth of the total manufactures. A very large and successful brewery has been established by Manila capital since the American occupation. Beer is to be had throughout the archipelago, and is accounted more wholesome than stronger liquors.

Lumber mills with American machinery have been introduced; several are successfully operating in Manila. Other industries of importance are carriage, wagon, and furniture making; brick, tile, pottery, marble and stone work; iron founding, cutlery, edge-tool making, bookbinding, rope and cordage manufacture, tanning, trunk-making, watch-making, and repair work of various kinds.

The native mechanical industries are mainly as follows: manufactures of cloth, hats, mats, cordage, tobacco, sugar, hemp, indigo, alcohol, oil, rice, soap, starches, cheese, leather, edge-tools, wagons, shipbuilding, building trades, and the fisheries products.

The making of hats, mats, bags, sleeping mats, and so on, from the native fibres is the most picturesque of the industries. Manila hats are in every way equal, if not superior, to the celebrated Panamas. The best, which are woven under water, very fine in quality and of double thickness, cost ten to fifteen dollars, and would retail in America as high as one hundred dollars each. Of course, much cheaper hats are made, which are admirable and are worn by all classes. For generations the same families have made these hats, and have become marvellously expert; their knowledge may almost be said to be a trade secret. However, these hats may not easily be secured in large quantities since there is no medium between buyer and seller, and the native weavers in hundreds of homes will sell them only upon cash payment. So poor are the facilities for marketing that in some

neighboring regions there may be a surplusage, while in others the demand is satisfied only by the importation of a machine-made article.

We have already mentioned the manufacture of sugar. On Negros Island and in Pampanga Province, Luzon, are many iron sugar-mills worked by animals, water power, or steam power. In Manila there is a large though not thoroughly modern sugar refinery, and another in Malabon, Rizal Province, south of Manila City. The native manufacture of hemp, as well as rope-making, is of great importance; but the manufacture of indigo for dye purposes has been, and probably again will become, a leading industry. The indigo plant thrives especially along the northwest coast of Luzon, though it undoubtedly will grow well in any part of the country. The dye is produced through several operations, — maceration in water, addition of lime, stirring and decantation of the water, formation of the indigo into masses. The young leaves of the plant are largely used.

In Manila to-day are a number of modern machine shops and foundries, in which the entire work is satisfactorily performed by native labor. One of the finest establishments of the kind is owned entirely by native capital; and all the workers, clerks, and administrators are Filipino people. The young men become excellent marine engineers, and in the handling and care of all sorts of machinery they show great facility.

It is indeed a very difficult matter to give the

percentage of the natives engaged in the various industries, for at some time most of the people are farmers, and at other periods of the year they are fishermen. Moreover, there is little coöperative work, very little use of machines, and little specialization of function.¹

Manufactures in the Philippines will necessarily depend in the future upon the native supply of fuel and ores, which are abundant.

Coal is found in very many regions. On the island of Batán immense deposits have been reserved by the Government. Engineers who have extensively investigated the fields there estimate the amount "in sight" as 76,000,000 tons, a supply capable of furnishing with fuel the present shipping for a period of almost four hundred years. It is believed, however, that the extent of the coal measures will be found to be much greater as the mining progresses. Much of this coal is now being used in ships. As a steaming coal it is unsurpassed. It burns fifteen per cent faster than the best Japanese coal, but it leaves almost no ash, and no clinkers. The island of Polillo, off the east coast of Southern Luzon, contains even larger deposits than Batán Island. Outcrops were discovered here in September, 1904, by Lieutenant Wray of the Philippine scouts. Several companies have been organized to develop the seams. Steam tests have proven very satisfactory. An analysis of this coal is as follows:

¹ See Table of Occupations in Appendix.

	Per cent.
Moisture	4.7
Volatile combustible	43.5
Fixed combustible	50.1
Ash	1.7
	<hr/> 100
Sulphur .28.	

A large bed of bituminous coal has been discovered about seventy miles north of Zamboanga, Mindanao Island. Extensive samples were sent to New York for testing. The verdict, by cable, was: "A good steaming coal; burns freely."

The importance of this fuel for naval operations in the Far East is obvious. Without it our fleets would, in case of war, be dependent for their source of supply upon colliers or the generosity of a foreign power.

Copper in quantities has been discovered in some parts. Marble, granite, lead, sulphur, kaolin, platinum, petroleum, quicksilver, salt, nitre, mercury, asphalt, antimony, zinc, and gas, also occur in about twenty of the islands, — including the larger ones, — and are perhaps to be found in many little known or unknown regions. Quarrying and stone-cutting are considerable industries. An American firm employs from 700 to 1500 men at quarries at Mariveles, on the mouth of Manila Bay.

Mining is an industry that bids fair to be of importance. For centuries the wild tribes have mined iron ore and forged spearheads and other implements.¹

¹ A recent issue of "The Engineering and Mining Journal" is authority for the statement that a belt of magnetite forty miles in length,

Streams, too, as in the Benguet region of Luzon, have been searched for nuggets and grains of gold. In this region the existence of a low-grade quartz ore has been established. The deposits occur in a solid formation of granite dike three-quarters of a mile in width, which cuts through the island northeast and southwest. At considerable expense Americans have recently established a stamp mill there, which is now running. The ore is treated with a free milling and amalgamating process, and runs about eleven dollars and forty cents a ton.

Both quartz and placer gold have been discovered

whose ores carry from sixty-five to seventy per cent of iron, extends through the mountains east of the great plains of Luzon. The richness of the copper deposits, says this authority, is indisputable. Most of the native workings are located in Bontoc Province, some of the producing veins being seven metres wide, and carrying an average of sixteen per cent copper. From 1840 to 1855 twenty tons of manufactured copper, crudely extracted, were annually exported by the Igorrotes. Lignite coal occurs in large quantities. In Cagayan Province, near Calbong Bay, outcroppings are plentiful. In the Rio Malanas Valley, near Abra Province, the seams are from three to seven feet thick. On Batán Island the seams vary from four to eight metres in thickness, and are easily accessible to the coasting steamers. The Compostela seams on Cebú Island are eight feet and more in width; the Compostela mines have furnished island steamers with considerable coal during the last decade, and a smelting plant is contemplated there. On Negros outcroppings are traceable for thirty miles parallel to and six miles from the southwestern coast. Coal has also been discovered in quantities on the islands of Leyte, Samar, Mindoro, and in the provinces of Rizal, Camarines Sur, Sorsogon, and Albay on Luzon Island. Lead ore carrying fifty-six per cent lead has been discovered recently in the island of Marinduque. Gold exceedingly pure, brilliant, and of an average fineness of .958 is being washed from the river sands in Neuva Ecija Province.



MODERN INDUSTRIES

Loading tobacco bales at Lalloc on the Cagayan River — A
modern steel steamer engaged in coastwise trade
— Stevedores waiting to load a steamer

on the island of Masbate, where gold-dredging machines of the Australian and Oroville, California, type have been introduced. This machine eats its way through the deposits of gold-bearing gravels, leaving a channel behind it, and deposits great heaps of detritus at the side of the canal as it burrows its way through the topmost strata. Quite a colony of miners is established on Masbate Island. A dredger working twelve hundred yards of gravel per day has averaged forty-two cents the cubic yard.

The little manufactories with their few employees, equipped with more or less obsolete machinery, are as familiar to travellers in the Philippines as in Japan. Modern factories are increasing. One of the most important of these treats the cocoanut by machinery, stripping the outer husk, which is used for matting, drying the *copra* (meat of the cocoanut), and extracting the oils and essences. For these the demand in European countries, especially France, far exceeds the supply. They are used in the making of rare and costly perfumes and soaps; and it may be observed that the soap of the *copra* is the only soap that is freely soluble in salt water.

The outlook for manufacturing enterprises in the Philippines would seem to be very bright, and the invitation to American capitalists is alluring. Not only is there an abundance of raw material and labor, but there is a great home demand, which even now pays the high prices caused by the exportation of the raw materials and the importation of the finished product.

BIBLIOGRAPHY

Vols. II. and IV. Census of the Philippines. Reports (mining, etc.) issued by the Bureau of Public Printing, Manila. "Coal Measures of the Philippines," by Lieutenant Chas. H. Burritt, formerly Eleventh Cavalry, U. S. V. "State of the Philippine Islands," by Tomás de Comyn, Madrid, 1810; translation by William Walton, London. "The Philippines and Roundabout," by G. J. Younghusband, London, 1899. A number of valuable monographs of recent date on Geology, Language, Plants, and Customs have been written by Dr. T. H. Pardo de Tavera. "The Philippine Islands," by Antonio de Morga; translation by H. J. Stanley, London (Hakluyt Society, 1868). "Philippine Geology," by Isidro Sainz de Baranda, former Inspector of Mines, Manila; and various up-to-date monographs by H. D. McKasky, Department of Mines, Manila. "Mines and Minerals in the Philippines," an article in "The Engineering and Mining Journal," New York, issue of May 4, 1907.

CHAPTER XII

HEMP-RAISING

OUTLINE OF TOPICS: Superiority of Manila hemp — The leading export from the Philippines — Rapid rise of the industry — Profits large; outlay comparatively small — Method of propagation — Prices of hemp land — Working on shares — Need of a machine to separate fibre from plant — Present method of stripping — Examples of successful hemp-raising — Bibliography.

MORE Americans have gone into the raising of Manila hemp than into any other Philippine industry. The reason is obvious: the establishment of a hemp plantation requires less capital for a beginner than either sugar or tobacco. While the returns per acre are usually less than those resulting from the cultivation of the other staples, yet the industry presents many advantages. With the exception of *copra* (the dried meat of the cocoanut), hemp is the simplest crop in the Philippines. Indeed, a considerable quantity is gathered from the wild hemp. Moreover, hemp plants come into bearing much earlier than cocoanut trees, the time required from setting out being eighteen months to three years, according to locality and cultivation.

Manila hemp, or *abacá*, is the product of the plant *Musa textilis*, a member of the banana family, closely resembling in appearance and habits of growth the

common banana (*Musa sapientum*), and the plantain (*Musa paradisiaca*). The Manila hemp plant bears a small fruit something like the banana, but of no economic value; on the other hand, the banana plant produces a fibre like *abacá*,¹ but lacking strength.

Philippine hemp is superior to all known fibres that are used in the manufacture of ropes and cordage. The *abacá* plant, too, enjoys the unique distinction of being strictly a Philippine product. "The plant has been introduced into India, Borneo, the West Indies, and other parts of the world, but only in the Philippine Archipelago has the fibre ever been successfully produced as an article of commerce."² The finest ropes for ships' rigging and for oil wells, where it is necessary to lower heavy pipe thousands of feet beneath the surface, are almost invariably of Manila hemp; indeed in the latter case it is preferred to wire cables. Thus the hemp industry is of importance not only to the islands but to the whole world. In 1905 the archipelago exported hemp to the value of more than \$22,750,000 (American). This is more than two-thirds of the entire exportation of the islands. Of this amount over half, or \$12,648,143 in American money, represents the hemp exports to the United States in the same period. Altogether there is probably an average of hemp worth \$27,000,000 now produced yearly in the Philippines, but some of

¹ The name "*abacá*," used in all parts of the Philippine Archipelago, is used to designate both the plant (*Musa textilis*) and the fibre, Manila hemp.

² H. T. Edwards, fibre expert, Manila.

it is used for home consumption in the manufacture of cloths, ropes, and for other purposes. The weight of the hemp exported from the Philippines in 1905 reached the enormous total of 256,756,000 pounds.

The cultivation of Manila hemp is old in the Spanish history of the Philippines. The first careful account of its use is that given by an Englishman named Dampier who lived on Mindanao Island in 1686. He described the "*banana textoria*" both as an edible and a fibre-producing plant. In 1820 a sample of *abacá* was brought to Salem, Massachusetts, by John White, a lieutenant in the United States navy. From 1820 to 1827 the fibre began to be used quite extensively in Salem and Boston. It should be observed here that there are many other hems besides the Manila hemp. Nearly all fibres have come into notice through their commercial uses; and as commerce and utility do not stop to inquire into scientific relationships, each fibre as it came into extensive use began to be known as hemp, qualified by the word signifying the place from which it came or the use to which it was put. There are bow-string hemp, Bombay hemp, Calcutta hemp, pita hemp, water hemp, and many others; but Manila hemp produces cordage superior in length and strength to that made from any other fibre. So enormous, it is said, is the demand for Manila hemp that, were the production doubled, the price would probably not be lowered to such an extent as to render other hems formidable competitors. A hemp plant which has been introduced into the Philippines with success is

the *maguey*, a species of the century plant, and long raised in Mexico, Yucatan, and South America. It is adapted to many sections not suited to the *abacá*. Compared to Manila hemp it is inferior in fibre and brings two-thirds the price. Maguey thrives on a rocky soil where scarcely any other plant life will grow, and requires absolutely no cultivation except when first planted. Even then the cultivation is probably less than that needed for any other commercial product. It withstands prolonged drought admirably without affecting the fibre at all. A fuller description will be found in another chapter.¹

The following table shows the gradual increase in production until the American occupation. Since that period the industry has gone ahead by leaps and bounds:

<i>Exports of Abacá from the Philippine Islands</i>													Tons
1818	.	.	.	.	.	.	.	.	.	.	.	.	41
1825	.	.	.	.	.	.	.	.	.	.	.	.	276
1840	.	.	.	.	.	.	.	.	.	.	.	.	8,502
1850	.	.	.	.	.	.	.	.	.	.	.	.	8,561
1860	.	.	.	.	.	.	.	.	.	.	.	.	30,388
1870	.	.	.	.	.	.	.	.	.	.	.	.	31,426
1880	.	.	.	.	.	.	.	.	.	.	.	.	50,482
1890	.	.	.	.	.	.	.	.	.	.	.	.	67,864
1900	.	.	.	.	.	.	.	.	.	.	.	.	89,438
1907 (estimated)	.	.	.	.	.	.	.	.	.	.	.	.	130,000

The new railroads will open up some of the richest hemp districts in the Philippines, and by far the richest

¹ Chapter X. on Agriculture.

in the world. Many fine areas especially suited to the cultivation of Manila hemp will be rendered highly valuable through improved transportation facilities. Most of the hemp now raised is produced in the peninsula of Southern Luzon, in the provinces of Sorsogon, Albay, and Ambos Camarines. Increasingly large quantities, however, are raised on the islands of Negros, Samar, Leyte, Mindoro, Marinduque, Mindanao and elsewhere. The industry supports thousands of people. Out of thirty-five towns in Ambos Camarines, twenty-seven are supported solely by the hemp industry.

The railroads to be constructed through these three provinces will connect rich interior regions with coast ports. Ultimately the lines will be extended to Manila. Between the city of Nueva Caceres on the line of the main survey, and the port of Pasacao on the west coast of Southern Luzon, is to be built a spur of fifteen miles. The writer knows of one little plantation of less than 200 acres, mostly in hemp, near this spur, that without cultivation has supported six orphan children for the past eight years. Both the father, a Spaniard, and the mother, a Filipino lady, were killed by native *ladrones* (robbers) when the insurrection was first declared. The estate lies in a beautiful little valley in the low mountains. The plantation is now overgrown with weeds, and resembles a deserted estate in the Southern States after the Civil War. The valley in which it lies is a steaming, tropical bit of luxuriance. Hemp likes

a steaming climate, with light volcanic soil, abundant rainfall, and plenty of drainage. For, as is the case with sugar cane, stagnant water is often fatal to it. Huge moss-covered trees shade the hemp plants, while the forest valleys in the region sequester many little plantations. The six orphans of this Spanish father and native mother are handsome, clean-limbed, gentle, olive-hued, patrician children. Until the death of the parents the estate paid net between \$5,000 and \$6,000 (American) yearly. Since that time, although it has not been cultivated and is practically overgrown with weeds and jungle, it has furnished funds to educate these orphans, the older children being sent to school in Manila. Besides, it has provided for them clothes, servants, and a sufficient living.

Hemp offers one of the best opportunities for the young man of limited means who is willing to live in the tropics. A young man with \$4,000 or \$5,000 (American) may start out with great assurance of success. Although the climate is very tropical in some of the hemp regions, it is not so in all. Moreover, the nearness of many fine hemp valleys to the seacoast enables one to live there within the pleasant and healthful influence of the ocean, and daily to supervise the estate a few miles in the interior.

Of the Americans who have gone into hemp-raising, there are, doubtless, very few who have been provided with capital to the extent of \$4,000 or \$5,000. Probably their beginnings would range between \$500 and



RIVER AND COAST VIEWS

The Cagayan, largest river in the Philippines — Bamboo fishing-nets in
 eighty feet of water — River travel in Southern Luzon —
 On the Cagayan, sixty miles from its mouth — A
 beautiful portion of the Cagayan — Heavy
 wooded bluffs on the seacoast

\$1,500. However, they are familiar with Philippine conditions, know how to "get around," and are acclimated. Their numbers are made up of former government employees, soldiers whose periods of service have expired, and perhaps a sprinkling of commercial or professional recruits from Manila. At Davao, Mindanao, about fifty Americans have gone into hemp-raising. In this they have been greatly encouraged by Major-General Leonard Wood, U. S. A., for two years in command of Mindanao, who has lent every assistance to pioneers. All through the islands, in fact, wherever conditions are suitable to *abacá*, you will find a few Americans engaged in the industry.

The hemp plant does not require much care; it is not troubled by insect pests; after the third year, and often earlier, it produces commercial fibres, and thenceforward the product increases steadily. The only serious pests are the wild hogs, which in some districts are multitudinous. These animals eagerly attack the young plants and render fencing advisable. However, they will be apt to avoid a plantation on which there is a lively pack of hounds. In the native (and usual) method of planting hemp there is no preparation of the soil in advance. Ploughing the ground for hemp is infrequent. At the close of the dry season, brush on the future plantation is cut, piled, and burned. The fire consumes all but the larger trees, which provide the shade necessary to the plants. The burning clears the ground of waste, destroys a portion of the seeds of weeds, and leaves an amount of

ash, the potash salts of which furnish a valuable fertilizing material.

After the land has been burned over, and before the beginning of the rainy season, the *abaca* shoots are set out at regular intervals, *camotes* (sweet potatoes) being planted at the same time. The latter, soon covering the ground densely, hinder the growth of weeds. The young plants are set nine to twelve feet apart each way, according to the variety of hemp and the nature of the soil. This gives from 750 to 1,350 plants to the hectare (2.47 acres). The ordinary method of propagation is from suckers. These are the small plants that grow from the root of the mother plant. They may be obtained on any large plantation at a cost of from fifteen to twenty-five dollars per thousand. Root sections are also used in setting out. Growing from seed is not favored, as it requires from six months to a year longer for the plants to mature.

In planting, a large pointed stick is used, which displaces the ground sufficiently to permit of the introduction of the young plant and some expansion of the roots. Until the plants are from one to two years old, more or less regular weeding is necessary. Their shade then discourages the weeds, and weeding becomes necessary but once or twice in a twelvemonth. Although hemp grows like a weed, it relishes cultivation. It has been estimated that the profits of a well-cultivated hemp ranch will, other things being equal, be four times as great as those made by the methods now in use. When the land is thoroughly cleared

and ploughed before planting, and the *abaca* is set in straight rows, subsequent cultivation may be done with animals. Under these conditions one native laborer with a carabao can take care of twenty acres, at a cost of fifteen dollars per month. With thorough cultivation the growth of hemp is much accelerated.

Land suitable for hemp varies in price. In Ambos Camarines Province the best hemp land can be bought at from six to ten dollars per acre. In Albay Province cultivated hemp land is held higher, — at from thirty to forty-five dollars an acre. Wages there are from twenty-five to thirty-five cents a day. Throughout the islands there is an abundance of public land suitable for hemp-growing that may be homesteaded. An individual may take up forty acres, but by forming a company he may homestead 2,500 acres.

The profits vary greatly according to the manner, not only of cultivation, but of extracting the fibre. At the present time the price paid for first-class hemp in Manila is from twenty-two to twenty-five pesos (\$12.50) per picul (137½ pounds). Owing to the increased use of binder and other twine, prices are much higher than formerly. Under ordinarily careful management, a yield of about seven to ten piculs an acre can be obtained. With 1,250 plants to the hectare (2.47 acres), and an average annual yield of four stalks per plant, the returns for one hectare would be 26.6 piculs, or a rate of 9½ piculs per acre. The usual method of cultivation and work is on shares. The native workmen are paid about one-third for stripping;

that is, for separating the fibre from the plant proper. A moderate and reasonable estimate of the net profits of hemp cultivation, the way it is grown now, is about forty dollars American money an acre. The average hemp plantation owner probably makes a good average of forty dollars an acre after paying all expenses of maintenance, labor, shipping to market, and incidentals. There are hundreds of native owners whose properties, being farmed on shares, they may themselves see but once or twice a year, and who yet derive this income. Hemp is like so much gold; it has a steady market price, and is negotiable at any time. Under modern methods its profits per acre will rank next to those of sugar or tobacco, while the demands for cultivation are less; and many of the planters have risen to prosperity.

The Philippine Bureau of Agriculture has prepared a statement as to the cost and the profits of hemp-raising. The estimate is moderate, for the Government does not wish to induce men to travel half around the world and then be disappointed. The figures are readily available. However, the equipment of fancy ranch "fixings," and the building of an expensive house, barns, etc., are extras in which the average American will not indulge. The man who knows the country will hire a few of the neighboring people and have them construct a house and fencings; for the wood from which the logs are sawn, and the bamboos, are always at hand. The Government estimates that at the end of eight years 625

acres of hemp will have paid for itself and yielded a credit balance of \$14,475. This estimate is based on a gradual planting, the last fifty hectares not being planted until the fifth year. The commercial life of the plant is about fifteen years.

The hemp country of Southern Luzon is a fascinating region. Wherever one goes in the mountains, he is apt to stumble on some little, unsuspected, sequestered hemp plantation, hidden away like a moonshiner's distillery in the Cumberland Mountains. In the mountains, in the lower and more populous country, — almost everywhere, in fact, you see the hemp fibre strung out in the sun on bamboo strips like a washing put out to dry. Some of it is twelve feet long. Wonderful fibres they are, like spun silver, even more delicate than the hair of one's head, and with a silvery whiteness when drying that suggests the inside of a white sea-shell.

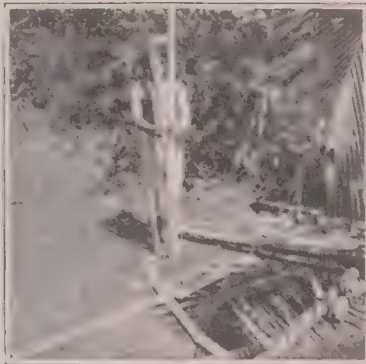
Formerly the work in the hemp fields was done by hand, but a machine has been invented which strips the hemp, each machine performing the work of thirty men. Its use will revolutionize the industry and create a tremendous demand for the production of more hemp plants.

It is interesting to see the workers on the hemp plantation during stripping time, which may last throughout the year, — an advantage, since it offers steady employment. The hemp plant when grown consists of a cluster of from twelve to twenty stalks all growing from one root. These stalks are

in all stages of development, but usually two or three are ready to be cut at the same time. The stalk is easily cut near the ground with one sweep of the *bolo*; the great top leaves are then lopped off. The "log" or trunk thus left is, say, eight to fifteen feet long and half a foot to more than a foot in diameter. This trunk consists of a small fleshy stem an inch or two in diameter, which is, as it were, the heart of the trunk, around which are a number of thick overlapping layers, each layer being the stem of the petiole or leaf.

The workman, seated on the ground with a trunk of *abacá* across his knees, inserts a small sharp piece of bone or bamboo into one of the outside leaf-stems or layers of the trunk. He rips off from the layer a fibrous strip two or three inches in width and as long as the trunk. One layer will yield two or three such strips. Each consecutive layer is thus worked down to the heart of the trunk. The finest fibres are obtained from the layers nearest the heart of the stalk. The various strips are composed of soft fleshy matter from which the elastic strands are separated by drawing the sheath between a hard block of wood and a knife which fits closely upon it. The best fibre is that from which all the fleshy matter has been separated, so that on being exposed to the sun it does not decompose, but looks like shimmering, shining silvery threads.

Often the natives use toothed knives in separating the fibre from the fleshy part. These toothed knives



THE MANUFACTURE OF HEMP

A field of Manila hemp — Stripping the hemp — Removing the layers from the stalk — The layers ready for stripping — A ranch of sisal hemp — Hemp drying in the sun

are easier to work with, but they do not strip the hemp clean. With such a knife the fibres are only partially separated, and only a portion of the pulp is removed; the work is easy, the yield large, and the fibre is inferior in quality. When fibre thus stripped is put in the sun it gets brownish, because some of the pulp clinging to it decays. With a knife having a smooth edge and held firmly on the base block, the work of stripping is much more difficult, and the waste is greater, but a very superior fibre is obtained. It has been determined by experiment that the same plant will produce a very superior or a very inferior grade of fibre, according to the kind of stripping-knife used. As a result of using toothed knives, the markets have been flooded with enormous quantities of inferior fibre. Now more care is being used, and the hemp comes from under the smooth knife clean and white.

Abacá, after being stripped, is hung on bamboo poles to dry. This drying takes from three or four hours to two days. When thoroughly dry, the fibre is collected, tied up in hanks or bundles, and in this condition is shipped by ponies, carabao, or *cargadores* to the nearest market. It is there sold to a Chinese middleman or to the representative of some one of the large exporting firms of Manila. When the fibre reaches the warehouse of the exporter it is carefully sorted into the different commercial grades, and is then baled, each bale weighing two piculs, or 275 pounds. *Abacá* fibre of good quality is from eight

to twelve feet long, of a glossy white color, very light and strong, and of clean, even texture.

An interesting story of a pioneer hemp-raiser is that of Captain J. L. Burchfield of the Davao district, Mindanao, formerly of Madisonville, Kentucky. In December, 1899, he landed in Davao. His property, nine miles south of Davao, was the first in Mindanao to introduce American farm machinery. Since coming to Mindanao Captain Burchfield's material wealth has increased tenfold. He owns an excellent plantation, has a comfortable home in the town of Davao, and has enjoyed as much health and comfort as during any period of his life. He is shipping eighty piculs of hemp a month, worth about twelve dollars gold per picul (one hundred and thirty-seven and half pounds), from his plantation. It is said that by the time of shipping the crop of 1906 Captain Burchfield had paid all expenses of establishing himself, and had \$25,000 profit.¹ Mrs. Burchfield went to Davao in April, 1901, making it her permanent home. There are now a number of American ladies in the district, who enjoy such good health and material comforts that they no longer feel that they are pioneers. Captain Burchfield has 3,000 cocoanut trees on his plantation. The cocoanuts yield from fifty cents to a dollar per tree a year when they are in full bearing.

¹ The author did not personally visit Captain Burchfield's plantation but his profits as given are by no means exceptional — there are probably native plantations cultivated in a more or less haphazard manner which have done as well or better.

A recent pioneer in this same region, Mr. A. C. McClellan, who came in May, 1905, has already about 50,000 hemp plants growing. He estimates that this work has cost only \$725. He has erected for himself a comfortable plantation house with commodious outbuildings; owns some good ponies and oxen, and lives much better than the average farmer in the United States. He does not carry firearms, although his workmen all go armed. Despite their wild looks, the men are peace-loving; they do not steal, and have always paid their debts. They raise their own fruit and vegetables. There are dozens of other Americans settled in the vicinity.

Away up at Iligan, a little town on the north coast of Mindanao, lives Frank Shepard, who has a plantation there. Formerly a commercial traveller, Mr. Shepard served for eight months in the Cuban campaign. He resigned; and after starting up again in St. Louis, he took the war fever, went out to the Philippines in 1899, and served three years. In October, 1902, Mr. Shepard went to Iligan. He put all his money into the country. He advises every one he talks with to invest. Mr. Shepard believes that a small capital is inadequate to expensive plantation purposes, owing to the fact that the initial expense is heavy, and that in the case of a product like hemp it is necessary to wait some time for the returns on the capital invested; but, when these returns do come, he says, they show a great percentage on the investment, amounting, often, at the end of five years, to

from eighty to one hundred per cent annually. He himself has a hemp plantation of 100,000 plants.

BIBLIOGRAPHY

Not many general data are to be obtained on the subject of Manila hemp-raising other than through the Philippine Bureau of Agriculture, which has gone exhaustively into the subject. An excellent technical pamphlet, "Abacá" (Manila Hemp), by Mr. H. T. Edwards, a recognized authority, may be obtained from the Bureau of Public Printing, Manila. Data on the growing of maguey in the islands can also be had. The Department of Fomento, City of Mexico, will furnish information as to the growing of maguey (a member of the century-plant family often called *sisal* or *agave*, and known as *henequin* in Mexico) in the state of Yucatan, Mexico, where the growing of this fibre is of huge importance. See also Bulletin No. 5 "Philippine Agricultural Products and Fibre Plants," and Bulletin No. 6, "Soil Fertility," both issued by the Bureau of Public Printing, Manila.

CHAPTER XIII

THE TOBACCO INDUSTRY

OUTLINE OF TOPICS: Tobacco the most profitable crop — Introduced by Spanish missionaries and monopolized by the Spanish Government — Raised by compulsory labor — Oppression of the native workers — Great profits resulting from careful cultivation — Extensive introduction of modern implements by Americans — The Cagayan Valley of Northern Luzon, where most of the tobacco is grown — Source of its great fertility — Excellence of Philippine tobacco — Rents and profits on small plantations — Crude native methods of raising and curing — The making and packing of cigarettes and cigars — Large consumption of tobacco by the natives — The huge family cigar — Dexterity of employees in the cigar and cigarette factories of Manila — Bibliography.

THE opinion is general that tobacco is the most profitable crop to the planter in the Philippines.”¹ In point of commercial importance it is the third agricultural product, being, as elsewhere noted, exceeded in value by hemp and sugar respectively. So exclusively is a large proportion of the producing population devoted to these three industries that their wealth or poverty at any given time is to a great degree a barometer, as it were, of the prosperity or distress of the land. Aside from the commercial importance of the tobacco crop, its manufacture is of consequence ; no other industry

¹ Census of the Philippines, Vol. IV.

has done so much to support the expense of administration in the past, and to-day no industry contributes more to the internal revenue. The internal revenue collected on cigars and cigarettes for the year ending June 30, 1906, was \$2,539,711.75; the entire proceeds of internal revenue, for the period, being \$8,803,356.91.¹

The manufacture of tobacco constitutes the most important industry in the islands. For many years an average of twenty thousand persons has been employed regularly in the making of cigars, cigarettes, and other tobacco products, while thousands of others pursue the industry in a more or less desultory fashion.² In character and modern equipment the tobacco manufactories of Manila compare with those of any place in the world. The fact that the growing of tobacco was under Government control for more than a century lends a special interest to its history. A recital of the past of the industry not only involves a showing of the relative advantages and defects of the Spanish administration, but perhaps more clearly indicates the disposition of the people and the future possibilities of agriculture when under intelligent direction than any number of published opinions upon this subject could possibly do.

The seed of the tobacco plant (*Nicotiana tabacum*)

¹ See statement internal revenue in Appendix.

² The Census gives "cigarmakers" as 11,036. The number of all tobacco operatives is about 20,000, the usually accepted estimate by Foreman and others; the number has not decreased since this enumeration was taken.

was among the many novelties introduced into the Philippines from Mexico by missionaries soon after the possession of the colony by the Spaniards was assured. "From this colony, it is said to have been taken, in the sixteenth or seventeenth century, into the south of China, where its use was so much abused that the sale of this alleged noxious article was for a long time prohibited by death."¹

The growing of tobacco was carried on largely under the direction of the Spanish priests in a somewhat desultory manner until 1781, when, for the purpose of raising greater revenues, it was decided to extend to the colony the monopoly already existing in Spain. The most stringent regulations were at once put into effect with the object of improving both the quantity and the quality of the export. For the student of economics, the tobacco monopoly is of interest, in that under a paternal government the people produced a better grade of tobacco than they since have. "During the last year of the monopoly — 1882 — the Spanish Government sold first-class tobacco in Manila at \$112 per quintal"² (100 pounds), an amazing price for this article in wholesale

¹ John Foreman.

² This was, of course, \$112 Mexican, per quintal (100 lbs.). At that time, — 1882, — a Mexican silver dollar in the Philippines was probably at a parity with gold — one quotation of Mexican in 1885 is 87 cents gold. (But we do not vouch for its accuracy.) From 1876 to 1880 Mexican frequently reached ninety cents; prior to 1873 it was at a premium. The best tobacco brought wholesale, therefore, more than one dollar per pound, a price rarely equalled anywhere except for wrapper leaf.

quantities. Often the average price of all grades was about seventy-five cents a pound, and as much as 3,000 pounds to an acre was frequently produced; now the best grades bring only fifteen cents, and the production on such a hacienda as San Antonio of the Tabacalera Company, where the methods though by no means modern are an improvement over those of the native planters, is about 1000 pounds to the acre; on native estates it is usually a great deal less, though, of course, large productions are sometimes had. As a general rule it may be set down that the native production in the Philippines where the people are not or have not been in contact with foreigners, is just enough to support the farmer and his family, regardless of the character of the soil or the size of his farm. If the land is rich it means just that much less work. Conversely, where his land is not fertile and its area limited the native farmer is a prodigious worker. It should be observed here that the monopoly was limited to the Island of Luzon; in the vast Cagayan Valley of Northern Luzon practically all the tobacco suitable for export is raised.

The faults of the monopoly lay not so much in the system, but in the details of oppression under which it operated. It contributed much to the continuation of peonage or practical slavery; but on the other hand, it established the high reputation of Philippine tobacco throughout Europe and the Orient; it disclosed the regions best adapted for the production of the finest grades of tobacco; and it instructed the



PHASES OF THE LUMBER AND TOBACCO INDUSTRIES
 A carabao logging team at Dalupaon — A Spanish tobacco planter in his
 warehouse — Mahogany logs on the beach

people in methods, at that time considered advanced. But the provisions of the monopoly permitted great latitude to harsh and unscrupulous officials, who, aware of its opportunities for "graft," sought Government positions.

Compulsory labor was authorized, says a historian. Those natives who wished to till the land (the property of the State) were compelled to give preference to tobacco; in fact no other crops were allowed to be raised. Each family was coerced into contracting with the Government to raise 4,000 plants per annum, subject to a fine in the event of failure. The planter had to deliver into the State stores all the tobacco of his crop—not a single leaf could he reserve for his private consumption. His right to the land was tenure by villein socage.

A tobacco grower, in a letter to "El Liberal" (Madrid) in 1880, thus describes the situation:

"The planter was only allowed to smoke tobacco of his own crop inside of the aerating sheds, which were usually erected on the fields under tilth. If he happened to be caught by the carabineer only a few steps outside of the shed with a cigar in his mouth he was fined two dollars; if a cigarette, fifty cents; and adding to these sums the cost of conviction, a cigar of his crop came to cost him \$7.37½, and a cigarette \$1.87½. The fines in one province amounted to an annual average of \$7,000 on a population of 170,000. From sunrise to sunset the native grower was subject to domiciliary search for concealed tobacco; his trunks, furniture, and every nook and corner of the dwelling were ransacked.

He and all his family — wife and daughters — were personally examined; and often an irate husband, father, or brother, goaded to indignation by the indecent humiliation of his kinswoman, would lay hands on his bolo-knife and bring matters to a bloody crisis with his wanton persecutors. . . . The leaves were carefully selected, and only such as came under classification were paid for to the grower. The rejected bundles were not returned to him, but burnt,— a despairing sacrifice to the toiler! The oppression grew so great that riots became of frequent occurrence. Many Spaniards fell victims to the native resentment of their oppression.”

Palpable injustice, too, was imposed by the Government with respect to the payments. The Treasury paid loyally for many years, but as generation succeeded generation, and the native growers' families came to feel themselves attached to the soil they cultivated, the Treasury, reposing on the security of this constancy, no longer kept up the compact. The officials failed to pay with punctuality the contracted value of the deliveries, yet they required exactitude from the natives. Instead of money, treasury notes were given them, and speculators of the lowest type used to scour the tobacco-growing districts to buy up this paper at an enormous discount. The misery of the natives was so distressing, the distrust of the Government so radical, and the want of means of existence so urgent, that they were wont to yield their claims for a relatively small sum in coin. The speculators held the bonds for realization some day. The total amount due by the Government at one time

exceeded \$1,500,000. Once the Treasury was so hard pressed for funds that the tobacco ready in Manila for shipment to Spain had to be sold on the spot, and the 90,000 quintals could not be sent, hence purchases of Philippine tobacco had to be made by tender in London for the Spanish factories.

The profits of the Government on tobacco during the monopoly are thus estimated by John Foreman :

Year.	Profits.
1840	\$2,123,505
1845	2,570,679
1850	3,036,611
1855	3,721,168
1859	4,932,463
1860	over 5,000,000

After 1860 they increased to a considerable extent, and at the time of the abolition of the monopoly they were paying over half the budget expenses of the Philippine Government, besides supporting an army of special officials who had been delegated to supervise its workings.

The hardships of the natives became so great that finally, in 1882, the Spanish Government gave ear to their complaints, and the monopoly was abolished.

The profitable raising of tobacco with careful methods is demonstrated by the success of various concerns that have been organized since monopoly days. In 1883 a company, styled the General Philippine Tobacco Company ("Compania General de Tabacos de Filipinas") was organized. It purchased four

estates in the Cagayan Valley, of which the largest is the Hacienda San Antonio, 7,500 hectares (18,500 acres). Upon this estate are 5,000 workers and their families. At the present time 2,000 acres is under cultivation, yielding annually 20,000 quintals of the finest tobacco. Some wrapper leaf, which it is claimed is unexcelled in the world, is produced. A hectare (2.47 acres) of tobacco is grown under shade for experimental purposes. Two enormous modern warehouses, each 36 by 60 metres, accommodate the yield of this plantation.¹ The General Philippine Tobacco Company, usually called the "Tabacalera Company," has become the wealthiest and most powerful of the corporations whose revenues are derived from the islands. Though the wealth of the company was founded on the tobacco industry, it extended its operations to other industries, and at first lost considerable sums in the provinces in its unsuccessful attempts to compete with the shrewd British merchants. The company is now, however, on a firm footing, and maintains an agency in every town of importance in the archipelago, dealing heavily in all native products. Its equipment is enormous. Its huge tobacco warehouses in the Cagayan Valley cover many acres, and store hundreds of thousands of piculs² of tobacco. It is a major stockholder in a steamship line operating between the Philippines and

¹ These data were furnished the writer by Señor Orres, the manager, while on the plantation.

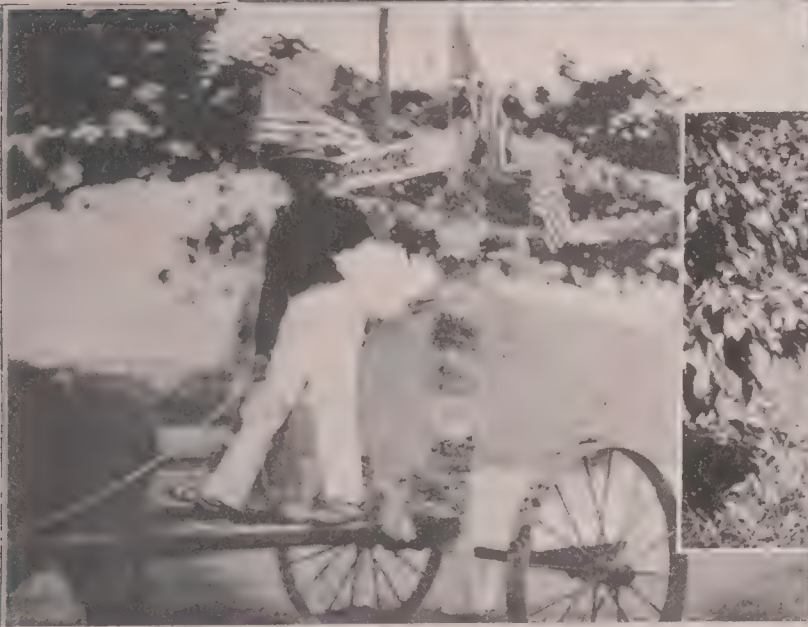
² A picul is $137\frac{1}{2}$ pounds.

European ports, and owns a fleet of eleven vessels engaged in inter-island freight and passenger traffic. Most of these steamers are thoroughly modern in equipment and construction. The capitalization of the company is \$15,000,000, on which it is said to pay substantial dividends, notwithstanding the increasing scope of its operations. Its success in securing adequate and satisfactory labor disproves the assertion sometimes made that the insufficiency of labor constitutes an insurmountable obstacle to large agricultural enterprises in the islands.

The bulk of the tobacco industry, however, lies in the hands of the native planters. In the Province of Cagayan are 147,000 inhabitants, of whom 23,000 are landowners. Counting five to the average family, it seems fair to assume that almost every farmer owns his own land. The same condition holds true of the Province of Isabela, south of Cagayan Province, which comprises the remainder of the Cagayan Valley. The condition of the few large companies, therefore, which are possessed of more or less thorough equipment, cannot form a basis for opinion as to the relative prosperity of the tobacco-raisers as a whole. To-day there are not half a dozen large firms engaged in tobacco production, superintendence, and trading. Of these, two are German and one is American. It is to be hoped that the latter is but the first of many American concerns to enter the tobacco field.

As regards introducing modern machinery, or impressing upon the people the advantage of up-to-date

cultivation for so difficult a crop as tobacco, the influence of all but the American firm will prove negligible until American methods become thoroughly introduced into the valley. The Americans formed the first planting concern that has extensively introduced modern farm implements for its own use. These, including such as are used in Canada and the Western States, have been found to be suited to conditions throughout the Philippines. In the equipment of this American planting concern is a small sawmill, by which is cut the lumber needed on the estate, and found in the forest fringes along the estuaries. There is also a general utility traction engine, which is useful both in hauling ploughs and in furnishing power for other purposes. It takes a carabao five days to scratch over an acre of ground ; but the steam plough will cover two hundred and twenty-five acres in the same time, and at only one dollar an acre. There are twenty-six handle ploughs, adapted for either buffaloes or mules, both being used on the hacienda, but the mules are found six times faster. There are ten transplanters which simultaneously set out and water the young tobacco plants after they are taken from the seed-bed. Each of these transplanters performs the work of about thirty persons. There are thirty-one clod-crushing harrows, of the type used on the Western prairies of the United States. These require no more pulling power than in more familiar regions, — perhaps less, for the soil in the alluvial



ASPECTS OF PHILIPPINE INDUSTRIES

Using a modern cultivator in gardening — Cotton float in an agricultural parade, Manila — Cocoa-plant, from which chocolate is made — Primitive ploughing in Moroland

valleys of the Philippines is a light sandy loam, the combined product of disintegrated volcanic and decayed organic matter, easily ploughed, harrowed, and cultivated. In this connection it may be remarked that the estate is not raw ground, a considerable portion of it having been cultivated in tobacco, sugar cane, and corn, for generations past.

No greater difficulty is experienced in cultivating the new soil than the old. In preparing the new soil for cultivation, the *cogon*, or wild grass, is burned off in the dry season, and the earth is then ready for the plough. In fact, in most of the alluvial valleys the question of brush is not one that the agriculturist has to contend with. The old soil, too, is as fertile as the uncultivated, since it is periodically enriched by the overflow of the Cagayan River. This estate, known as Hacienda Calabbacao, is nine miles south of Tuguegarao, the commercial capital of the Cagayan Valley. Once it was quite famous, but, like many other plantations, it gradually fell into disuse, and until the arrival of its American owners presented the appearance of many plantations in the South at the close of the Civil War.

In the remainder of the equipment are goose-neck ploughs with four-horse hitch, wing shovel ploughs, barley and hay forks, spades, hoes, irrigating shovels, weeders, pulverizing ploughs, windmills, corn cutters, corn planters, brush breakers, potato hooks, full blacksmith and carpenter outfits, post-hole augers, and a duplicate of every important implement. The

agricultural implements for this estate (44,000 acres) have cost to date upwards of \$15,000. But a material saving was effected through their purchase in this country, an important point for the prospective agriculturist to bear in mind, inasmuch as it results in a saving of about one-third the invoice. About half the estate is river bottom land, and about half higher or rolling land. The equipment, however, is found as suitable to one portion of the hacienda as another. An area of hilly land has been fenced off with barbed wire as a pasture. This is a useful object lesson, as the introduction of barbed wire would be a godsend to the people in securing quarantine of live stock. The arrival of the Americans on the tobacco field is but recent, their first crop having been harvested in 1906.

Of the two German firms, one having its principal warehouses near the city of Tuguegarao has been especially successful, its earnings being stated at from fifty to one hundred per cent per annum. Of two native companies one is said to have paid a dividend of thirty-two per cent, and the other of thirty-five per cent for the year ending June 30, 1905.

The above instances have assuredly demonstrated the profitableness of the tobacco industry when capably handled; but it must be borne in mind that almost the whole of it is in the hands of small owners. Moreover, a proportion of the best leaf tobacco handled by the large firms is purchased from, or grown on shares with, the native grower who, lacking the

means, has not been able to keep pace with the improved methods followed in other countries. To this reason is to be partly ascribed the deterioration in quality of the bulk of Philippine tobacco. With so perplexing a crop, indifferent methods inevitably produce indifferent results.

For 140 years Philippine tobacco has been exported to Spain, its use gradually extending to Belgium, France, Holland, England, Turkey, Egypt, China, and Japan. To-day it is sold, mostly in limited quantities, to thirty-five different nations. It is much favored in Eastern Asia, — for instance, in Japan, where Manila cigars, bringing on the average fifteen cents (gold) each, are everywhere displayed to the exclusion of all others, although the Japanese Government maintains a monopoly in the production and manufacture of tobacco within its own territory; and in China it meets with a large and increasing demand.

Despite the high reputation which Philippine tobacco has achieved, and the constant demand made by the press of the United States for free trade with the islands, but little is known of the vast Cagayan Valley of Northern Luzon, where practically all the export tobacco, and probably nine-tenths of the factory-made tobacco that is consumed in the islands, is grown. That valley has long had an established civilization, but being little affected by the insurrection it escaped notice in the press.

At one time the writer took a six-hundred-mile trip,

passing by divers and circuitous routes through the heart of Luzon. Striking the headwaters of the Cagayan River, we followed its course to Aparri, the northernmost port of the island, and distant four hundred and eighty miles by sea from Manila. The Magat River, which is the principal tributary of the Rio Cagayan, flows through broad mountain valleys and gently elevated plateaus for more than one hundred miles in an air line before it joins the Cagayan near Echague, one hundred and forty-seven miles in an air line from Aparri. The volume of Philippine rivers is surprising, in comparison with their lengths. El Rio Cagayan seems like the Mississippi. At Tuguegarao city, sixty miles from its mouth, it is as wide, seemingly, as the Mississippi at St. Louis. But near its source in the mountains — not one hundred miles from Manila — the Cagayan is a gently flowing stream, which glides through green mountain meadows or goes creeping through dark forests, to emerge now and then from a steep and narrow canyon.

Almost one-third the way down its course, at Echague, the Cagayan has become a great sluggish stream flowing through a huge plain sixty miles in width. Here is population. Hundreds of native women, clad garishly in red and yellow print-goods, crouch in the water at the river's bank attentive to their washing. Fishermen are there, throwing huge circular trap-nets into the stream. *Barangay*, or iron-hulled, bamboo-covered freight boats, come creeping to the shores, awaited by a crowd, who would trade

with the Chinese proprietors. They are really floating stores, for the Chinese have the confidence of the people and do much business with them. Farther down its course the stream goes swiftly. It winds around great bluffs, two or three hundred feet high, clad with trees resembling oaks. Again the valley opens out into a wide, level plain, where hundreds of workers are assembled in the fields. Often the river glides past some great forest, where troops of monkeys perform innumerable antics as if for the amusement of the traveller; while large white cockatoos and buffalo herons, disturbed by the approach of the steamer, circle in flocks over the water for a moment and return chattering to the dense shade of the forest.

The Cagayan Valley embraces an average width of forty miles between the precipitous, purple-peaked Cordilleras that divide to make way for it, — lying generally north and south. The valley is one of the surprises of the Philippines. So many of the aspects of the temperate zone does it present, that one is inevitably reminded of our Southern States, though it has true Philippine fertility. It is “the richest agricultural district in the islands, where the agricultural possibilities for the future are almost unlimited.”¹ Though the government discouraged the planting of anything but tobacco, there grow almost without cultivation the following: cotton, corn, sugar cane, sweet and Irish potatoes, beets, onions, peanuts,

¹ Dean C. Worcester.

cocoanuts, guavas, fine oranges, — big as a man's two fists, and having an excellent flavor, — and the *luthu*, a mealy native tuber much like a sweet potato, out of which is made a sort of flour. Many kinds of native fruits and cereals are grown. As a whole the Cagayan Valley is a huge, open, grassy, undulating, gently sloping plain, dotted here and there with groves of trees or with solitary trees, while the watercourses, estuaries, and tributaries are lined with fringes of bamboo and dense forests. Taken in detail the beauty of the valley baffles description.

Apart from climatic conditions favorable to the cultivation of fine tobaccos, the fertility of the Cagayan Valley is largely due to the annual overflow of the Cagayan River, which occurs about the middle of December of each year, in the latter part of the rainy season. The floods at this period, together with the northeast monsoon which restricts the passage of the waters into the China Sea, cause the river to rise above its banks and to present the appearance of a huge inland sea. After a week or ten days the water subsides, leaving a rich fine mulch of the consistency of soft soap.

The following quotations indicate the natural fitness of this valley for tobacco-raising:—

“The enormous capacity for development of this valley of the Cagayan, which includes the provinces of Isabel and Cagayan, can hardly be exaggerated. It is a common thing for the natives to use their land seven or eight months of the year for tobacco, and then to

derive two successful crops of corn in the four or five remaining months of the year.

“When the Philippine Commission made a journey up the Cagayan Valley in Luzon (1901), it was informed that practically all the ‘good land’ was understood to be those parts fertilized annually by the overflow of the river. It was stated that the other land was not considered first-class because it would only produce tobacco for ten or twelve years without enrichment, the subject of fertilizing never having received any attention from the planters of that region.”¹

In speaking of the possibilities of tobacco culture the “Official Handbook of the Philippines” comments as follows:—

“The qualities which determine the price of tobacco are combustibility, strength, aroma, fineness, elasticity, color, and uniformity. Intelligent and experienced direction by practical men, with scientific aid in the matter of seed selection, instruction in cultivation, curing, and marketing, such as will be furnished by the Bureau of Agriculture, will enhance the value and quality of Philippine tobacco until it will become second to none; for already the leaf from the provinces of Isabela and Cagayan compares favorably with that of the Vuelta Abajo district of Cuba.”

It should be observed, however, that in quality and flavor Philippine tobacco is *sui generis*. It is not too much to say that as fine leaf has been and can be produced in the Philippines as anywhere

¹ Wm. H. Taft, in “Pronouncing Gazetteer,” Bureau of Insular Affairs (1902).

in the world. But it will not easily be mistaken for any other tobacco, though it perhaps more resembles that of Sumatra than that of any other country. It is a mistake to presume that, were Philippine tobacco to be introduced into this country, it would at once meet with universal approbation, for the preferences of the smoker are largely a matter of education.

A. M. Sanchez, Soil Physicist, Insular Bureau of Agriculture, says: —

“The general character of the soils of the Cagayan Valley is a sandy loam, three feet or more in depth, easily cultivated and in good physical condition.

“The cultivation of tobacco in the Cagayan Valley is now limited to the ‘bottom,’ or lands subject to the overflow from the back waters of the Cagayan River. Once or twice during the rainy season these low lands are flooded with several feet of water, which contains considerable quantities of fine sediment, rich in fertilizing matter, which from the standing water are deposited on the surface of the soil. No artificial fertilizer is used on tobacco lands. . . .

“In the Cagayan Valley the best quality of tobacco is grown on the light, sandy loam soils bordering the river. The product is a fine leaf, very suitable for wrapper. The soils are all bottom land, and are inundated at least once a year.”¹

A common inquiry is, What profits may be made in the various industries of the Philippines? To give a definite answer is obviously impossible, and is nowhere

¹ Government testimony.

attempted in this volume, since no two planters, under equal conditions, will secure equal results.¹ This difference is especially apparent in the low attainments of the poor native planters as contrasted with the achievements of foreign cultivators. An idea of the value of the commercial crops may be gathered from the fact that almost all are raised along the Cagayan and Chico de Itaves Rivers and their estuaries, beginning at Gattaran in the north and extending to a point beyond Ilagan in the south, a distance of considerably less than one hundred miles in an air line. The production in this circumscribed district of practically all the export tobacco is a most favorable commentary on the results achieved even under present methods.² Statistics are unsatisfactory: some native planters accumulate considerable wealth; much of the population seems fairly well-to-do and prosperous, while others are extremely poor. The average family does not cultivate over one hectare (2.47 acres) of land. As the profits from this small plot keep the planter and his family throughout the

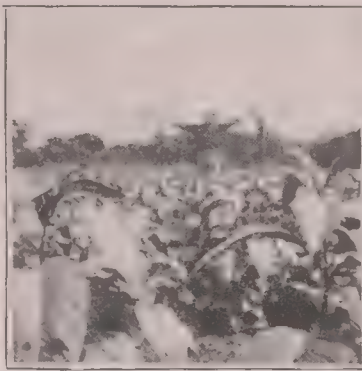
¹ We have made an exception in the case of hemp which requires little culture, and is not subject to much variation.

² In an address before the National Association of Manufacturers Hon. William H. Taft stated the average tobacco production on native farms to be but three hundred and ninety-five pounds to the acre. While we cheerfully accept this statement from such high and disinterested authority as absolutely conclusive, yet, on the other hand we are mindful of the fact that the export alone, valued for 1906, at \$2,843,000 (gold) was produced in an exceedingly limited area, and therefore conclude that the general average was lowered by farms throughout the archipelago where tobacco is not raised for commercial purposes.

entire year it is accounted very valuable. Farming on shares is much practised. "The labor system in the northern Philippines is quite distinct from that adopted in the south. The plantations in the north are worked on the coöperative principle. The landowner divides his estate into tenements, each tenant being provided with a buffalo and agricultural implements to work up the plot."¹ This arrangement obtains in the plantations of the Cagayan Valley, in the hemp districts of Southern Luzon, and in the sugar regions of the provinces about Manila. In the Cagayan Valley the rental of the land (that is, of a small plot), the work of one carabao, and the work of one man are each accounted one-third. Therefore, if the farmer's carabao dies and he rents a carabao of another, he gives that other one-third the crop; while if he owns neither land nor carabao he gives him two-thirds, retaining but one-third for his labor. Thus it will be seen how the loss of the carabao through rinderpest, the curtailment of the Spanish market, and the failure to open our own markets have affected the small grower in what would otherwise be for him an extremely profitable venture, despite the smallness of his operations.

The cultivation-on-shares system may or may not be the outgrowth of peonage. In any event, though the latter evil was formerly prevalent in the Cagayan, the shares system is not now abused. Peonage, too, is gradually becoming eradicated through the

¹ John Foreman.



GROWING AND CURING TOBACCO, AND A NATIVE TREE

A tobacco field in the Cagayan Valley — Loading tobacco on a banca —
 Tobacco plants six weeks after transplanting — Native
 method of curing tobacco — Red lanau tree,
 the pine of the Philippines

existence of American courts, and is almost unknown in most of the civilized regions.

Tobacco is crudely cultivated by the natives. The following description by the Hon. G. Gonzaga, Governor of Cagayan, will be interesting as being largely applicable to all methods of native agriculture:—

“Cagayan, situated in the extreme north of the Island of Luzon, enjoys a more temperate climate than the other provinces of the Philippine Archipelago. Surrounded by mountains covered with vegetation, and crossed in all directions by rivers and estuaries, there is maintained in the soil by the frequent overflows an accumulation of those fertilizing agencies essential to agricultural purposes.

“The plough used in the preparation of the fields is of Chinese model and origin, with narrow shares, shaped like wings, of a smaller size than those used in Europe. To this a carabao is hitched, the only work animal used by the Filipinos, perhaps by reason of its greater strength and endurance as compared with all other cattle of the country. In spite of this, the plough hardly penetrates the soil more than ten centimetres in making furrows in irrigated lands used for the cultivation of rice, while in dry lands and fields intended for tobacco the farmer finds it necessary to cross the ground three, four, or even more times, in different directions in order to turn the earth over to a depth of twenty-five or thirty centimetres.”

Governor Gonzaga also mentions that the Spanish monopoly performed a useful function, in proving that the best tobacco may not be grown within the influence of the seas. Thus the suitable area begins

at Gattaran on the Cagayan River, about twenty-five miles south of Aparri.

It is interesting to note how the native planter works. Usually he saves sufficient seed from the past year's crop to plant his seed bed. This is done in the latter part of November or early in December. The plants in the bed grow very thickly, and when six or eight weeks old they are transplanted. Transplanting on the high land occurs in the latter part of December or early in January, and upon the low or overflowed lands usually a month later. The young plants are set out a metre apart each way.

It is a strange sight to see men, women, and children out in the fields planting and smoking at the same time. On a few of the farms the young plants are watered at the time of transplanting, and also shaded with sections of banana leaves; but not so on the plots of the native farmers. The plant attains maturity in about three months. As the leaves successively ripen they are broken from the stalk; this is, it is said, an improvement on the method followed in Connecticut, where the entire plant is cut. After being placed in bundles the leaves are hauled on a sledge to the dwelling, where they are strung up beneath the floor on strips of bamboo, each strip containing from eighty to one hundred leaves. Here, among the minor live-stock, the tobacco remains until it is either sold for market or thoroughly dry, at which time the more intelligent native planters take it into the dwelling and pack it into bundles.

The leaves thus cured are almost invariably damaged by the weather. A modern curing shed is practically unknown among the native planters. Frequently the leaf, which in texture and coloring is admirably suited for wrapper, is rendered all but useless by exposure, mildew, improper fermentation, or burning by sun. The natives do not observe the necessity of seed selection, the topping of plants to force the vigor of growth to the leaf instead of giving it to the stalk, and the removal of suckers or surface roots. This native method of curing tobacco is the cause of a greater deficiency in most of the crop than is the method of cultivation. We have repeatedly seen excellent tobacco exposed to the rain, and sometimes covered with a thick mildew that entirely concealed the original color of the leaf.

The manufacture of tobacco is an important Philippine industry. In the more prominent establishments in Manila modern machines and methods are used in the production of cigarettes and cigars, and in their packing, boxing, and preparation for sale. More women than men are employed in this industry, and both men and girls possess a deftness with their fingers which is rarely equalled by one of the white race. Without counting, a girl operative will grasp invariably the required number of loose cigarettes and insert them in the package.

The Filipino people are constant users of tobacco. By far the larger portion of the crop produced and manufactured in the Philippines is consumed at home.

The total number of cigarettes manufactured and consumed during the fiscal year ending June 30, 1906, was 3,509,038,750, — a greater consumption of cigarettes *per capita* than can be shown in any other country. This, added to the number exported, indicates the magnitude of the tobacco industry. Very large cigars, sometimes thirty inches in length, are smoked by the women of the Cagayan Valley.

Tobacco-raising is an industry of many possibilities.

“If the United States took all the Philippine cigars that are exported, it would add about one per cent to the total number now being manufactured and consumed in the United States. If all the cigars manufactured in the Philippine Islands were exported to the United States only, they would supply the natural increase in the cigar consumption for about five months, . . . after which the American cigar manufacturer would continue with all his old trade plus the regular increase of two per cent or more from year to year.”¹

BIBLIOGRAPHY

“Pronouncing Gazetteer and Geographical Dictionary,” Bureau of Insular Affairs (1902). Reports of the Philippine Commission. Census of the Philippines, Vol. IV. “The Philippine Islands,” by John Foreman. Reports Insular Bureau of Agriculture, Manila, P. I., Bureau of Insular Affairs, Washington, D. C. “Soil Conditions in the Philippines,” by Clarence W. Dorsey, Bureau of Public Printing, Manila. “Tobacco Leaf,” by Killebrew and Myrick, 1897. “Tobacco Soils of the United States,” by Milton Whitney, Government Printing Office, Washington, D. C. “Address by Hon. W. H. Taft,” Press of

¹ Report of Philippine Commission, 1906.

New York Chamber of Commerce. On the whole the bibliography of the tobacco industry in the Philippines, — excepting, of course, the statistics of the manufacture of cigars and cigarettes (in Manila) which may be precisely ascertained, — presents much confusion, largely owing to the discussions for or against free trade. For examples of opposing views by various authorities see “Hearings before the Committee on Ways and Means, Fifty-ninth Congress, First Session,” “Hearings before Senate Committee,” etc., Government Printing Office, Washington, D. C.

CHAPTER XIV

THE SUGAR INDUSTRY

OUTLINE OF TOPICS: Immense productiveness of Philippine sugar plantations — Lack of modern refineries — Development of the industry after the Crimean War — Cost of producing sugar in the Philippines — Value of sugar lands — Troubles of the small native planters — Great capital an essential to successful production of sugar — The excellence of Philippine soil and climate for sugar-raising — Cane growing and crushing — Need of railroads — Great increase in the consumption of sugar in the United States — Sources of supply of sugar — Limited amount of public land that can be homesteaded by one company — General Leonard Wood's opinion on the industry — Bibliography.

THERE are unusual opportunities for enterprising Americans to enter the cane sugar industry in the Philippines. Perhaps no other country where large sugar areas are now available has been endowed by nature with conditions of soil and climate so peculiarly adapted to the raising of this great staple product. In the future progress of the islands the sugar industry, it is generally believed, is most certainly destined to become one of the most important commercial factors. "The conditions for profitable returns are exceptionally favorable upon these islands; the climate cannot be surpassed, and cane soils are unequalled; there is an abundant water supply, and facilities for transportation

by water are unusually good, while the difficulty of land transportation will be quickly overcome by the successful planter.”¹

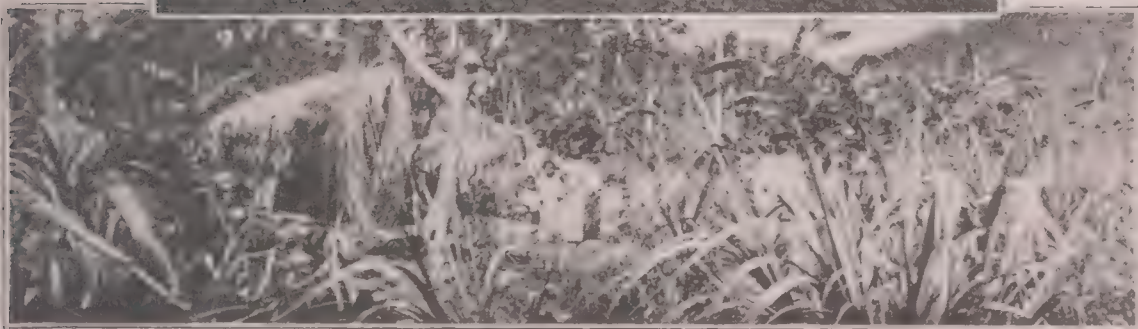
The importance of the sugar industry to the islands can hardly be overestimated; with the exception of hemp, it gives employment to more of the rural population than any other branch of agriculture. At the present time it furnishes all the sugar required for domestic consumption (though practically all the refined sugar used is refined outside the islands), and the surplus for export, which for the year 1905 had the value of \$5,073,233.² Despite the importance of the industry to the people, their methods of cultivation and of extracting the juice from the cane are extremely crude. As with tobacco, the fear has been expressed that should Philippine sugar be admitted with a reduction of duties, or duty free, into the United States, it would become a serious competitor to the beet and cane sugar industries in this country. A discussion of the question would obviously be inappropriate in this volume; but it is not out of place to call attention to the fact that the crude methods of agriculture described in another chapter obtain specially in the cultivation of the cane. It is not generally understood how very inadequate are the present facilities for the manufacture of cane sugar. There is no large modern refinery in the islands.

¹ William S. Lyon, expert in tropical agriculture and member Insular Bureau of Agriculture in the Philippines.

² See Table in Appendix.

The machinery even in the best mills is very primitive. In Luzon there is nothing larger than a three-roller mill, worked by carabao. In Negros there is a five-roller mill of a pattern of twenty-five years ago; all the rest are three-roller mills, and average a total loss of the juice of the cane of forty per cent. There is not a vacuum pan in the whole archipelago, and not one pound of centrifugal sugar is made. The cooking is done in a sort of old tureen which was used in other sugar countries about a generation ago, and which our New England farmers now use in the making of maple sugar. The sugar and molasses are boiled down hard and then beaten up with spades. Experts say that the crude sugar thus obtained contains so much glucose, ash, and dust that it is difficult to recover at the refinery the eighty-four per cent of sugar indicated by the analysis. When the native operators have boiled the sugar down, it is wrapped in loose bags made of the cane stalks, and exported to Hong-Kong and elsewhere.

Cane was introduced into the Philippines at an early date by the Spanish priests. That in the Visayan Islands, in Negros, in Cebú, and in some degree in others, came from Java; while Tahitian, Mexican, and later Hawaiian cane, were planted in Luzon. Various species were imported by Chinese immigrants from the island of Formosa, which was then under Chinese rule. The industry was intermittently pursued, however, for many years. It was not until 1855 and the following year, during the Crimean



CHARACTERISTIC SCENES IN THE PHILIPPINES

A river scene — Type of home of the poorer civilized class — A native
sugar plantation — Neglected sugar cane — Root system
and part of trunk of the narra tree

War, which involved England, France, and Russia, that attention was seriously called to the possibilities of cane culture. The price of sugar had risen to thirteen dollars per picul of 137½ pounds. Owing to this incentive, cultivation of cane increased in the Visayan group and in Luzon, and was extended into many of the remote provinces. The industry was further stimulated by the opening of Iloilo and Cebú to international commerce through the arrival of Mr. Nicholas Loney of the English house of Loney and Company.¹ Mr. Loney, a pioneer now long since dead, gave great impulse to the development of the Philippines, and particularly to the Visayan Islands. His memory is still revered among the people there, and he is often spoken of as the original benefactor of the trading community of that region. It was due to his firm and the later American firm of Russell and Sturgis, that the development of sugar on a wholesale scale, under methods then modern, was made possible. The pioneer native planters, unprovided with sufficient funds, exposed to many hardships, and lacking a knowledge of the use of agricultural devices, would have been unable to progress without aid. Both these foreign firms, however, advanced the planters funds for operating expenses and the purchase of machinery to such an extent that three

¹ Mr. Nicholas Loney, H. B. M. vice-consul, arrived in Iloilo in 1855 and represented Messrs. Ker and Company. Through his efforts Iloilo was that year opened to foreign trade. He founded Loney and Company about 1858. He died in Iloilo April, 1869, and a monument is there erected to his memory by the natives.

thousand plantations, large and small, were established. The industry reached a high degree of prosperity. It remained in good condition for almost thirty years. All these plantations, although many of them were of less extent than five hundred acres, were provided with sugar mills, the majority of which were operated by steam, and the balance by hydraulic motors and animal power. Some of them were provided with tramways for the transportation of the cane to the mill, and the manufactured product to the ports or market towns.

In discussing the future of the agricultural industry of the Philippines, and consequently the future of the people, the fact that not only the cultivation of sugar and tobacco, but practically all industries, have reached their highest point when the native farmers have had encouragement and direction from foreign speculators, is a most hopeful augury of the results to be attained under American rule. American equipment and methods of agriculture, it may be asserted without boastfulness, are everywhere recognized as the best in the world. Practically all the devices for economic and scientific agriculture, as the steam plough, the combined harvester, the modern sugar mill, the transplanter, and a great variety of implements, are of American invention.

The methods that were introduced by foreign firms in the early period of the industry, however, did not advance with the times. With the disturbed condition that some years after followed the zenith period

of the sugar industry and the withdrawal of Loney and Company, and Russell and Sturgis¹ from the field, the cultivation of cane and the manufacture of sugar made no advance; the old methods were gradually superseded by new ones in Java, India, Hawaii, and even lately in Cuba.

Sugar has been produced in the Philippines at from sixty to ninety cents per one hundred pounds. It can doubtless, when produced by modern methods, be laid down in New York at a little over one cent per pound. As against this may be given the cost of producing beet sugar, the lowest cost being estimated by some producers in the United States at from three to four cents per pound. In the New York markets the average wholesale price of refined sugar has been, for the year 1906, four and one-half cents per pound. The Philippine product may be brought from Manila to New York in steam vessels for from twenty-seven to twenty-nine cents per one hundred pounds, a freight rate comparable to the rail-rate between Omaha and Chicago.² The duty on this sugar to the United States is one dollar and forty-six cents per hundredweight.³ The

¹ Russell, Sturgis and Company, a Boston firm, failed about 1876.

² According to testimony before the committees on the Philippines of the United States Senate and of the House of Representatives.

³ See Sec. 209 of Public No. 11, Government Printing Office, Washington, D. C. On all sugar which has gone through a process of refining the duty is one cent and ninety-five hundredths of one cent per pound; on sugars not above sixteen Dutch standard in color, testing by the polariscope not above 75 degrees, the duty is ninety-five hundredths of one cent per pound. Philippine duties are twenty-five per cent off the face of this schedule.

approximately 7000 tons of crude sugar shipped into San Francisco from the islands during the first eight months of 1906 paid a duty of \$213,249. Bearing these facts in mind, the Philippines seem to offer greater opportunities to capital than any other region. The fact that the sugar now brought into this and other countries is of inferior quality must not be offset against the showing of possible cheap production, for the reason that it costs less to manufacture good sugar with proper equipment than inferior sugar with defective equipment. However, the establishment, maintenance, and superintendence of large plantations is not only a costly undertaking, but one which requires much time. Assuming that sufficient available sugar lands could be obtained from private parties, it would require decades, possibly generations, as it has in Java, to bring the islands to their highest sugar-producing capacity. It may be confidently stated that there is an unexcelled opportunity for the establishment of an up-to-date refinery in Manila, the bulk of the crop now being refined in Hong-Kong. There are also some of the finest sugar estates in the world available for modern plantations.

As against the comparatively low values of cane sugar lands in the Philippines may be set the high values of lands similarly suitable in Hawaii and Cuba. All the large sugar lands in Hawaii are taken up. Many estates are valued at from \$500 to \$2000 an acre. In Cuba the best sugar land is valued at from

\$400 to \$800 an acre, but is not for sale in areas great enough to support a sugar mill. Yet in the Philippines there are thousands of acres of the finest sugar lands. It is estimated that in Hawaii the cost of irrigation and fertilization amounts to at least twenty per cent of the total value of the crop. It is necessary to irrigate practically every acre of Hawaiian sugar lands, and pumping plants are in operation on nearly every plantation. Not infrequently the cost of these plants varies from \$250,000 to \$500,000.

The following estimate, made some years before the American occupation, for sugar-planting on the island of Negros, would still hold true in many parts of the archipelago, though as a rule, wages have risen:—

4 overseers @ \$6.00 per month each the whole year	\$ 288.00
40 laborers @ \$4.00 " " " " " "	1920.00
1 machinist @ \$30.00 " " " " " "	360.00
1 assistant machinist @ \$15.00 per month for the season of three months	45.00
100 laborers @ \$1.50 per week for the season of three months	1800.00
Food for laborers during whole time of service	2000.00
Total	<u>\$6413.00</u>

This relates to the total cost of the labor required for the cultivation of 420 acres of sugar land.

In estimating the profitableness of sugar cultivation and manufacture, the distinction should be observed between the earnings of the native planters who are hampered with inadequate capital and obsolete machinery, and those of modern concerns operating with

the fullest equipment, a sufficiency of running capital, and systematic management. At the present writing most of the sugar planters in the islands are passing through a period of distress. Their unfortunate condition is to be ascribed to many causes, chief among which is that they are greatly hampered by lack of capital. The soil is producing \$5,000,000 worth of sugar a year for export, even while the land is tilled as though in the stone age. Yet to a great degree the profits go to the money-lender, for the poor native owner has neither the cash nor the equipment to carry him from one season to another. He is always borrowing money on his crop, paying in sugar at least two dollars for every one that is advanced to him. This loan is not solely secured by his future crop; when borrowing the money he is compelled to make a contingent additional mortgage on his land, should the crop fail. It is impossible for the planter to evade paying his debt, since the loan is made payable in the crop and not in cash. By this means almost any law which could be framed might be evaded. Sometimes the native farmer through this system gives from one-half to two-thirds the gross value of his crop to the money-lender.

To relieve the situation, the Government has passed an act authorizing the establishment of an agricultural bank from which the farmer may obtain the necessary funds at a reasonable rate of interest. The natural assumption is that the system of usury is to

a greater or less degree the outgrowth of peonage common in Spanish days, but almost obsolete since the introduction of American courts and the instruction of the natives that their bodies are not to be held in slavery for debt. Sugar plantations requiring a large amount of capital have especially fallen a prey to the usurer. The loaning of money at from twenty to fifty per cent is not uncommon.¹ These loans are made by the wealthy Filipinos to the poorer classes; for while the people are inclined to deal generously with their immediate circle of friends, there is little compassion on the part of the wealthy toward the peasant class. Practically all the Filipino capitalists are interested in non-industrial undertakings, in which management is of slight importance. Their money is loaned out at enormous rates of interest on Philippine farms; and the worse the condition of the farmer, the greater is the rate of interest exacted. Filipino native capital is generally invested in land and mortgages; it is very timid, and until the last few years has not engaged in constructive enterprises. The wealthy Filipinos, however, are not to be entirely blamed for the system. Often the native farmers are carelessly improvident, and then the risk is considerable. On the other hand, so fertile is the earth that the earnings of these investments are frequently far greater than of those in more civilized communities. From these facts it is easy to learn why the sugar

¹ Indeed, money is sometimes loaned at as high a rate as one hundred or more per cent per annum.

industry in the Philippines has not kept pace with the same industry in other countries.

Sugar production is one which requires great capital. To make sugar at small cost requires expensive machinery and appliances. The greater the investment in suitable machinery, the smaller the cost of production. A modern refinery costs upwards of half a million dollars; but sugar manufactories which are not properly equipped lose all the way from fourteen to forty per cent additional of the juice of the cane. The Philippines, lacking in these modern refineries, have been seriously handicapped in a manufacture for which they are so eminently fitted. To-day they offer excellent opportunities for capitalists. Formerly a tolerable refinery was established at Malabon, near Manila, but it is now discontinued.

With the possible exception of tobacco, there is no staple agricultural crop in which the condition of the soil plays so important a part as it does in sugar-cane. The plant is one which, by virtue of its great size and rapid growth, not only draws heavily upon the fertility of the soil, but it also demands that the earth shall be of a light character to permit full play of the root's functions. These requirements are admirably met in many districts throughout the archipelago. In the sandy, sedimentary, alluvial soils along the sea coast; in the rich mountain valleys, heavily charged with the humus in which the cane rejoices; in the tropical forest regions; also upon virgin sedimentary river bottoms, the cane develops to a size and with a



A SORGHUM EXHIBIT IN AN INDUSTRIAL PARADE



A BAMBOO WAGON IN USE ON A TOBACCO PLANTATION

luxuriance that is phenomenal. Indeed, in some forest regions the remains of decaying vegetation are so excessive that they are sometimes injurious.

There is an almost unlimited quantity of virgin soil in the islands. By this it is not necessarily meant that the land has not before been cultivated. Within the tropics land that has once been cultivated and then allowed to relapse quickly reverts to its primitive condition, and in a very few years acquires a fertility which it would take a generation to accomplish in a more northern climate. The humus or decayed vegetation which occurs in such abundance in the Philippines is the one fertilizing agent most vital to the highest perfection of the sugar-cane. The *quasi* virgin land and the land that is naturally fertilized by the overflow of rivers seem to contain a proportionate combination of humus and mineral elements that offers an excellent food for the growth of a strong, vigorous cane, rich in the precious saccharine matter that crystallizes freely, and that always commands the highest price in the sugar markets of the world.

The question of fertilization is one that hardly arises in the Philippines. Indeed, owing to the richness of new soil in some districts, the cane has developed with a speed prejudicial to its market value. Though in some sections fertilization could assuredly be most profitably employed by native planters who have cropped the same ground for generations without fertilizing, yet with the abundance of available land it seems to be considered unnecessary. The sandy,

sedimentary alluvial soils have longest stood the test of time. As before noted, many regions are naturally fertilized by overflows and therefore may possibly require neither fertilization nor irrigation.

Philippine sugar is grown by ratoons or root cuttings. In some sections it is planted every other year, but frequently in alluvial soils planting takes place but once in every five, six, seven, or even ten years, though the crops are gathered annually, — provided care is taken after the cane is harvested not to injure the stalk, and in the proper cultivation of the new sprouts or shoots. The cane is generally planted in ground that is sufficiently moist and well drained, and that has been well worked and prepared. On most plantations the cane is put in during November, December, and January, the same months in which the crowning takes place. The primitive methods of cultivation prevail. The plough, which is a crooked stick or the crotch of a forked tree, scarcely penetrates the ground four inches; the harrow is of bamboo construction, with wooden teeth; a big bowie knife for cutting the cane, and a bamboo sledge for hauling it to the mill, complete the ordinary equipment. Sometimes the mill consists simply of a log set in a trough. This log is rolled against the cane and the juice slips into the bottom of the trough and falls out of a faucet into a receptacle below. Except in a very few cases sugar is generally sold as the crop is being gathered. In addition to sales made by planters in the producing districts, a large part of

their sugar is placed in the hands of jobbers, who sell it at a higher price in the markets of Iloilo and Cebú, —ports that are open to general commerce, and as such having each a custom house. In these cities there are firms engaged in the business of buying and exporting sugar, the price being based on the law of supply and demand, as shown by market quotations received from the principal commercial centres of the world. The best prices are obtained in Iloilo and Cebú.

The value of lands suitable for sugar-growing varies considerably, being dependent on proximity to a port or a sugar market, and on site, boundaries, quality of soil, facilities for drainage, etc. The best and most conveniently situated sugar land is perhaps worth as high as \$100 to \$150 an acre. These high prices, are, however, exceptional at the present time; frequently good lands can be had for almost nothing.

The essential feature for the consideration of a grower who does not design to crush the cane himself is the accessibility of his farm to a mill. The measure of this accessibility will be determined entirely by the cost of transportation, which will depend on the condition of the existing roads, the cost of construction of new ones or tramways, or of the availability of waterways. Water freightage is so valuable a means of transportation that it can be utilized for the extension of cane-growing into regions that otherwise could not be made available. This is particularly true of the great Cagayan Valley of Northern Luzon, where

despite the almost exclusive attention given to tobacco, some especially fine cane has been raised for home consumption; and of the Cotabato Valley, Mindanao, where at intervals between the Moro raids early Spanish and Chinese settlers cultivated with success a superior quality of cane.

A new interest is lent to the sugar industry by the building of the railroads. The railroads in the Visayan Islands, especially those to be built in Negros, will open up some of the richest districts in the world, and will give an added impetus to all lines of industry. The shipment of about seven thousand tons of crude sugar to San Francisco, during the first eight months of 1906, in the face of the high tariff, long haul, and primitive methods of cultivation is an instructive lesson on what can be done in sugar production in the Philippines. With the coming of railroads and American enterprise a new era is at hand. If the islands can, as they did, export from 122,925 to 261,519 tons yearly from 1880 to 1898, with only a few thousand acres under indifferent cultivation, without modern agricultural implements, with crude refining plants and disheartened working people, and with a loss of forty-five per cent of the juice, at a cost of only sixty-two and a half cents to ninety cents a hundred pounds, what may not be expected under labor-saving implements, modern equipment, American capital, American energy, and American executive ability!

Sugar-growing affords exceptional opportunities by

reason of the world's expanding market. Not least should be reckoned the fact that the islands, being connected with this country, are under the flag of commercial progress and freedom. The United States is the greatest sugar-consuming market in the world. Our consumption is so enormous — six and one-half billion pounds for the year 1906, and valued at over three hundred million dollars — that we can easily absorb all the sugar which Cuba, Hawaii, and the East Indies can produce, plus the rather limited product of our own beet sugar factories, and still have room for all the output of the Philippines for many years.

The demand of the United States for sugar is increasing at the tremendous rate of one hundred and fifty thousand to two hundred thousand tons a year. That this increase is supplied by foreign countries, may, perhaps, be inferred from the fact that of all the sugar consumed by us in 1906 only one-fifth was produced in the continental United States; one-fifth came from Cuba, Porto Rico, and Hawaii; and the rest — 3,856,655,661 pounds — from foreign countries. Not only are we using more sugar with our increasing population and a higher standard of living, but the entire world is rapidly acquiring a "sweet tooth." The Orient with its nine hundred million people is following the footsteps of the Occident; and China, with four hundred millions of this nine hundred millions, takes far more Philippine sugar than the United States does. In fact, this country constitutes perhaps the most promising market. In Java the Dutch are giving

great attention to sugar-raising, but they cannot establish plantations on a vast enough scale, with the limited land still available there for cultivation, to keep up with the prodigious demands of the world.

“In the last twenty-five years Louisiana has multiplied her sugar yield by three. In the meantime Hawaii and Porto Rico have been added to the United States, with their production of substantially a half-million tons, to say nothing of Cuba, which has reached a production of one million, two hundred thousand tons,” valued in its raw state at about seventy-five million dollars. This sugar was produced from not more than four hundred thousand acres of land. The thirty American sugar plantations in Cuba are capable of producing one-third of the total output of that republic. Most of the Cuban sugar is imported into this country, in spite of the development of sugar in our own territory and in Hawaii and Porto Rico. The United States has more than doubled her importations in the past twenty-five years.

“Our consumption of sugar has multiplied by three in the same period of time. Let this increased consumption go on for another quarter of a century, and the home beet sugar crop may be multiplied by three, and the cane sugar crop of Hawaii, Porto Rico, and Cuba may be multiplied by three, and still there would be room for the Philippine crop to multiply by sixty, and all come to the United States. It is true we need not expect our home consumption to increase threefold in the next quarter of a century, but it is extremely reasonable to expect it to

double. Neither will any one acquainted with the Hawaiian situation be found to predict one hundred per cent increase in output in twenty-five years or even in a hundred years. The land and water are not there to double with. Neither will Louisiana double her product in twenty-five years, and these two sources make up about two-thirds of the present domestic supply. If the consumption should double and the present domestic supply should double, there would still be need for three million tons of sugar from somewhere, or three thousand per cent more than the Philippines now produce.”¹

The consumption in 1896 was 4,390,592,640 pounds, and in 1906, 6,415,389,120 pounds, the increase in the ten years being 2,024,796,480 pounds. The production in 1896 was 647,635,520 pounds, and in 1906, 1,304,607,360 pounds, an increase of 656,971,840 pounds. The increased consumption in the ten-year period was 2,025 million pounds, while the increased production was only 657 million pounds. Thus the increase in consumption from 1896 to 1906 was more than three times as great as the increase in home production. The share which domestic sugar took in the total consumption in the United States was, according to the Bureau of Statistics of the Department of Commerce and Labor, in 1906, 20.5 per cent; in 1905, 21.9 per cent; in 1895, 19.4 per cent, and in 1880, 16 per cent.²

Though the land suitable for sugar-raising in the Philippines is almost limitless, yet the bulk of it is

¹ W. S. Lyon, Insular Bureau of Agriculture.

² See Table in Appendix.

public land. Under the present laws a corporation cannot get an absolute title to more than 2500 acres of such public land. This is not enough to run a modern sugar mill. In this connection General Leonard Wood says:

“Corporations desiring to go into the sugar industry on a large scale are confronted with the difficulty of obtaining possession of a sufficient amount of land to insure successful business. Five thousand acres of public land is about all they can secure through lease or purchase under the present law. Ten thousand acres is what is required by a first-class large-sized mill to keep it running; in addition to this such a mill usually takes the cane from hundreds of small farmers for miles around.”

The law does not alone restrict the amount of *public land* that may be acquired, — 40 acres in the case of individuals and 2500 acres to corporations, — for it expressly limits corporations by their charters to the acquisition of not more than 2500 acres of *private lands*. An exception is made to corporations that irrigate, and under this exception such corporations may be organized as holding companies. The act does not apply to individuals or copartnerships, and these may purchase as much private land as they desire. The salient features of the land laws are to be found in paragraphs No. 14 and No. 75 of the Act of July 1, 1902 (Public No. 235), generally known as the Philippine Organic Act. There is no doubt that these restrictive features have exerted a powerful

influence in deterring capital from investment in the islands. Both the spirit and the provisions of the law are generally misunderstood. The object is stated to be to prevent speculative investments in Philippine lands, and while the acquisition of large quantities of public lands by any one concern is positively barred, yet seriously intentioned companies which will comply with the laws may, by reason of the exception mentioned, acquire as much private land as is desired, provided they place their tracts under irrigation, which is as profitable in the Philippines as elsewhere. Of course the extent of private land is comparatively limited, though the 400,000 acres of the fine friar lands purchased by the Government are classified as private lands.

However, numerous excellent haciendas are to be purchased in the sugar regions. Many plantation-owners would be glad to sell out or to take interests in up-to-date concerns with modern machinery, modern management, and modern methods. Already numerous estates have been improved in anticipation of the coming commercial era of the Philippines, the beginnings of which are already being beneficially felt. Even without free trade, there is a vast market in the Orient, Australia, and Europe for Philippine sugar. While the United States offers opportunities for well-organized concerns, raw sugar, it has been asserted, can be laid down in New York and San Francisco, duty paid, for less than \$2.35 per hundred pounds, or less than two-thirds what it costs to raise it in foreign

Cuba. With the economically certain growth of sugar in the islands, there is bound to follow an enormous demand for American machinery and numerous other articles incident to increased earning capacity and a higher standard of living among the people of the Philippines.

BIBLIOGRAPHY

Sources to which the inquirer may turn for information on the sugar industry are extensive and numerous. Among these is the published testimony before the Senate and House Committees on the Philippines. Apply, Bureau of Insular Affairs, Washington, D. C. "Farmers' Bulletin" No. 1, being a primer on the cultivation of sugar cane, by Wm. S. Lyon, published by the Bureau of Printing, Manila, 1904, is especially recommended. "Growing Sugar Cane in Hawaii," by William C. Stubbs, Ph. D., being an extract from Bulletin No. 95. U. S. Dep't of Agriculture, Washington, D. C. "Weekly Sugar Trade Journal," published by Willett & Gray, New York, the acknowledged authorities on sugar. The independent commercial influences in Manila are probably able to furnish the most valuable personal information as to sugar in the islands.

CHAPTER XV

LITTLE-KNOWN OPPORTUNITIES

OUTLINE OF TOPICS: Development of good feeling between Americans and Filipinos—Commerce as a promoter of international good-will—Absence of Oriental caste and conservatism—Opportunities for the development of electrical power—Need of improved transportation facilities—An instance of success in interior transportation—Great opportunities for factories—Desirability of Government aid in building factories—Abundance of raw material for making goods that are in demand—Utilization of by-products—Mechanical devices much needed—Need of electric lighting in prosperous cities—Bibliography.

IN the confusion and uncertainty of the first years of the American occupation, it was but natural that each of the two races—Americans and Filipinos—overlooked the good qualities of the other. Much of the first mutual suspicion has been disarmed, and practically all animosity has disappeared, before the closer personal relations that have resulted from commercial, economical, and political associations. The tension of a few years ago has relaxed, and the Filipinos seem to be in a receptive mood for the establishment of business relations with Americans.

The sociological value of the business man as an envoy of peace and good-will has long been recognized. Especially have his good offices won recognition in

the Philippines. Mr. Carson Taylor, editor of the "Manila Daily Bulletin," says :

"The strongest tie that can bind any two peoples together is that of commercial interest. Hearts and treasures are not far apart, and politics and business are not apt to lose each other. Whatever becomes a source of profit to the Philippines will be pretty sure to become also a plank in the platform of political creed. The exporters of a country may do more to maintain the desired *entente cordiale* than the diplomats of court. The dreams of theorists soon melt before the facts of commerce, and the greatest gains of the past six years of the Philippines have been the gains in communication with the larger commercial life of the world."

The success of the new industrial ideals in the Philippines has been wholly due to the character of the Filipino people and the lack of rigid caste in their social organization. Individually they possess no inherited distrust of the foreigner nor a dislike of his commercial methods, but are willing to lay hold of them when they are seen to be profitable. There are no distinctive tribal creeds to prevent the people's development. Although the lines between rich and poor are firmly drawn, yet these are not lines of caste. The distinctions of social station are defined strictly by the wealth, education, or intelligence of the individuals. The son of the humblest may rise to exalted position without being hindered by his lowly parentage.

The traditional conservatism of China and the Orient in general, excepting Japan, is non-existent in



SCENES UNDER MODERN CONDITIONS

A wedding party leaving the church, Northern Luzon — Filipino planters
 watching a Government demonstration of a traction
 engine — A successful hunting party

the Philippines. The success that has attended the introduction of new methods designed for the welfare of the people gives hope for the success of new lines of trade and new industries. Each year these opportunities increase, for the effect of the missionary work of commercial concerns is cumulative.

An opportunity doubtless exists for the development of electrical power from mountain streams. A few power wheels have already been introduced successfully for the use of individuals. But there is great need for large companies which will develop power and retail it to the small consumer or use it themselves in lumbering, transportation, etc. Electric power in the United States is now being carried profitably for a distance of more than three hundred miles. Electric power, developed from steam, is already being retailed in Manila. This power is particularly valuable to small manufactories in that it is divisible, and the customer may purchase as large or as small an amount of it as he desires. The existence of many streams of great fall, large volume, and steady flow, undoubtedly is a natural resource of great value. There are so many streams of this character throughout the land that it is inadvisable to enumerate them here. Perhaps the greatest single opportunity for an enormous plant would be one which would develop power from the Argus River in Mindanao. The river rises in Lake Lanao, elevation 2,400 feet above sea level, and after a torrential course of twenty-one miles empties into the ocean at Ilagan Bay. Two miles

from the mouth of the river there is a vertical drop of 220 feet. Here the flow of the river at the time it was gauged was 5,800 cubic feet per second, and, from inquiries among the inhabitants, and considering the steadying effect caused by the storage capacity of the lake, it is believed that the minimum flow would not be less than 2,000 cubic feet per second. Assuming the efficiency of the hydraulic apparatus at seventy per cent, and that of the electric generator at ninety-five per cent, 32,250 electric horse power would be delivered at this point even in the most prolonged dry season. Altogether, it is estimated that at least a half-million theoretical horse power, even during extreme low water, is being wasted between Lake Lanao and Ilagan Bay. There would be, perhaps, an opportunity for an electric line to transport freight and military supplies between Lake Lanao and the coast; a good road has been built.

The opportunities for capital to improve the transportation facilities in thickly populated districts, or along natural lines of freight travel, seem to be excellent. Several years ago an inventive American observed the great traffic across the narrowest portion of Luzon peninsula, connecting the east and west seas. The journey across the peninsula, near Daet, is but a level seven miles, while around by sea it is close to three hundred miles of bad sailing. Tracks were laid, and a small crude railroad was built, the cars being propelled by mules or carabao. The undertaking has proved extremely profitable. It handles

all the freight, especially in wet weather, when the roads are muddy. The Government lends every assistance to enterprises of this sort. It has frequently offered mail contracts and contracts for the transportation of military supplies by pack trains, river steamers, and other means of conveyance. Native traffic is heavy. Passenger trade on the inter-island steamers makes up in volume for the comparatively low fares.

One has but to glance at the imports to realize the opportunities for factories. An average of about one million dollars per month is expended for certain products, many of which are now being sent away in a raw state to be manufactured in other countries and then to be returned to the Philippines for local consumption. This is indeed "carrying coals to Newcastle." Although the amount thus expended is not actually great in comparison with the country's resources, yet when it is considered that the total money in circulation is much less than thirty millions, it will readily be seen how serious is the drain imposed upon the country by its lack of factories. The opportunity for profitable home factories is intensified by the high prices which manufactures command.

A plan has been proposed by Mr. Charles E. Wheeler, president of the American Chamber of Commerce of Manila, that, where for political or economical reasons local private capital hesitates to engage in enterprise, the Government build factories. When these

are on a paying basis the Government could sell them to private concerns. The plan has been practised with marked success in Queensland, Australia. It seems to possess much merit, in that it would engage local capital and encourage reinvestment.

A modern sugar refinery could be advantageously located in Manila. At the present time there is an inferior refinery at Malabon, a suburb of Manila. But it is quite inadequate and has not run steadily. Practically all the refined sugar in the islands is treated in Hong-Kong or elsewhere, and returned in commercial form. Factory labor is quite plentiful in Manila and an up-to-date refinery seems an economic certainty.

Rope manufacturing is a promising industry. Rope-making on primitive lines is carried on all over the islands; but it is a household industry, and the rope produced is necessarily limited in length and size, and not of the best grade, though it is saved from inferiority by the quality of the hemp. Although the archipelago is the greatest producer of the finest cordage material in the world, most of the rope used is imported.¹ The largest makers of rope are Yngchausti

¹ Hong-Kong, the greatest tonnage port in the world, and also Shanghai and Singapore, are all famous ship-refitting points and immense consumers of cordage, no strand of which is of Philippine manufacture. The Philippine manufacturer enjoys a positive handicap of more than twenty dollars on each and every ton of imported rope. The savings that he effects are, an export duty on the raw abaca, two transportations each half-way around the world, as well as double commissions, brokerage, storage, insurance (fire and marine), drayage, interest, and port dues.

and Company, who own a ropewalk within a short distance of Manila. The plant has been in operation fifty years. It was three times burned down during the insurrection. The average product is four hundred and fifty tons per annum. From one hundred and fifty to two hundred and fifty men, women, and children are employed the year round, and the operatives, who live in the little village surrounding the ropewalk, are contented and prosperous.

Furniture-making is another industry offering exceptional advantages. The Filipinos are highly skilled workmen in this line; the wages paid are exceedingly moderate; and the country contains an abundant supply of the rarest and most beautiful cabinet timbers in the world. Great quantities of American lumber, which is not suited to withstand climate and insects, and has but a short life in comparison with native timber, and a considerable quantity of manufactured furniture, are now being imported. Of the eight sawmills in Manila only three are of modern type, and these three are very small compared to the average mill in the United States. There is, undoubtedly, an opportunity for thoroughly equipped sawmills which shall operate their own timber concessions and so assure themselves of an abundant supply of raw material. All the mills in the islands are operating to their full capacities and are unable to get on hand a supply of seasoned timber that will meet the requirements of furniture factories. The mills are always behind their orders. Indeed, most of the timber

is sawn to order. The well-to-do and wealthy classes furnish their homes most exquisitely.

The utilization of by-products in factories that employ native labor at low cost deserves a whole chapter. Among these by-products are the discarded leaves of the Manila hemp plant, which contain a large amount of valuable fibre; the husks of the cocoanut, which, though sometimes made into matting or used as fuel, are generally discarded. But space will not permit an enumeration. There is a great dearth of cattle food and farm fertilizers; but the establishment of silos, and the manufacture of cheap fertilizer from waste products should prove profitable.

Tanning is an industry that should receive attention. Most of the hides exported are in so hard and brittle a condition as to be almost beyond redemption. Although the forests abound in the finest tanning bark in the world, but little effort has been made to put it to skilled use. Firewood brings a very high price in Manila. Concessions for firewood tracts can be obtained from the Forestry Bureau in regions affording easy and cheap water shipment to the metropolis. Such concessions, it may be observed, are perhaps more favorable in the Philippines than in any other country, and the royalties paid the Government are far less than the cost of buying timber lands outright. The getting out of ties for the new railroad construction is attracting much attention. A preference is given to native ties, and no royalties are charged by the Forestry Bureau.

There is an especial need for mechanical devices that will supplant present primitive and often expensive methods. While most of the machines and devices used in the United States might be used also in the Philippines, yet local needs frequently require special apparatus. Of the classes of implements now adaptable may be mentioned windmills, hoes, spades, ploughs, rakes, irrigating machinery, broad-tired steel wagon-wheels, certain kinds of edge-tools, rice mills, and many other implements. Only through a knowledge of the islands may one realize the opportunity for specialized devices. There is a tremendous need for small machines which the people could work by hand-power, since at the present time they largely lack the power and equipment to operate more intricate machinery; there is also need for simple farm machinery, as windmills, which the people themselves may operate. Among needed devices may be mentioned wagons and ploughs adapted to the carabao and to native bullocks, aerial tramways to carry cut timber from the hills to tidewater, cheap modern looms, and sewing-machines. We have seen even the savage people using hand sewing-machines. Small rice-hulling mills to be operated by hand-power may be successfully introduced.

Initiative is much needed to develop the industries; and there are many profitable enterprises that may be undertaken by the young man of executive ability and small capital. We know of a school-teacher who formed a partnership with a wealthy Filipino in a

distant province. They purchased a rice-mill and a gasoline engine to run it. Though in a great rice-producing district the people had shipped but little rice, as it was necessary to hull it with the primitive wooden bowl and long thick stick, or else export the rice in the straw on the backs of animals. During the rainy season this was impracticable, and it always was expensive. Now the rice is threshed in the district where produced, and is easily shipped by pony pack to the nearest markets, where it brings a high price. Formerly there were years when this district produced rice in abundance, while forty miles away there was almost a famine.

The manufacture of candles suitable to the tropics would be profitable. Many thousand dollars' worth are imported each month, while there is an abundance of oils and fats suitable for making them. Even cement and marbles are imported, despite the abundance of the raw materials in some localities. The establishment of ice-making and electric-light plants in the smaller cities would be a paying investment. This is particularly true of electrical power plants. There are many old and established cities of from two thousand to forty thousand or more inhabitants, the streets of which are still lighted by oil lamps. A contract could doubtless be made with the municipalities for street electric lighting, while light could be sold to residences and private establishments. In manufacturing towns it could be furnished to rice mills and a great number of small factories. We know of several



PRIMITIVE MEANS OF TRANSPORTATION

considerable cities whose inhabitants would welcome with open arms an electric-power company.

In conclusion, the following may be mentioned among the manufactured articles now imported into the archipelago, which are suited to home manufacture or production: cotton and cotton manufactures, known in the islands as print goods. Many of the weaves of native fibres are very cheap, strong, and durable. Unquestionably they could be placed in competition with the common cotton fabrics that now clothe the people of the Philippines and the millions of poorer folk of British India and the teeming islands of Oceanica. The coarser grades could be sold at the same level as medium cottons, which they will outlast. Cotton is raised in the islands, but not in sufficient quantities to support factories; but the raw material could well be imported. Yarns and threads, cordages and ropes, hats and caps in great quantities, lace and embroideries, all of these are articles for which there is an enormous demand, while there is likewise an abundance of the raw materials. Children's toys are introduced in quantities, and to our mind the manufacture of such toys would prove an exceptionally profitable industry. Considerable quantities of jewelry are manufactured in the islands, yet the imports are large, and a large jewelry manufactory, well-equipped, might be successful. Glass and earthenware, earths and stone, are introduced in great quantities despite the existence of unexcelled glass sands, pottery clays, and the abundance of coal fuel;

there is also abundance of bones, hoofs, horns, ashes, hides, skins, fertilizer, lumber for furniture, drugs, dyes, bags for sugar, carpets, preserved fruits (the islands contain a wonderful variety of citrus and other tropical and semi-tropical fruits), grease and soap stocks (the finest natural soap supply is found in the Philippines), paper, and paper products. Large quantities of machinery are now imported, though the lack of development of the native ore deposits would hardly seem to encourage extensive foundries at the present time. However, the manufacture of small implements is already proving successful.

CHAPTER XVI

THE PHILIPPINES FOR THE SIGHTSEER

OUTLINE OF TOPICS: The Philippines easily reached from Hong-Kong and Japan — Manila hotels — Traces of Spanish colonization — Churches — The Walled City — The Luneta — Up the Pasig River — The climate of the Philippines — The tourist season — Some trips for travellers — The summer capital at Baguio — Taal Volcano — Some inter-island steamboat trips — Scenic charms in mountain districts — Cost of a tour through the islands — Jungles on the mountain tops — A wagon journey through the provinces — Dress and equipment for Philippine travel — Big game hunting — Bibliography.

THE traveller in the Orient should by no means neglect the opportunity to visit the Philippines; their convenient location as a transshipping place, and their accessibility through many steamer lines, at once dispose of the objection that they are out of the way. Manila can be reached in two days from Hong-Kong, and in from four days to a week from Japan, depending upon the number and length of stops in intermediate ports. Those who are bound from North China or Japan to Australasia will naturally stop over at Manila.

For the citizen of the United States who aspires to familiarize himself with our first great colonial undertaking, or who seeks trade or diversion, a journey to

the archipelago is well worth while, involving, as it does, a glimpse of a great part of the Orient.

Manila, being the first port of destination for almost every visitor, naturally commands our first attention. Accommodation for the tourist is suitable and is rapidly being amplified to meet the demand. The city contains several good hotels and a large number of social clubs, wherein the tourist is entertained. There are many restaurants. One can, by ordering in advance, get as fine a meal as anywhere in the world. Guests at the hotels are charged an average of about two and a half to five American dollars per day, with special rates by the week or month. A magnificent hotel, to cost \$500,000, has been planned by the Government, and last reports indicate the acceptance of a bid from a private contractor. Completion of the edifice is expected within the year 1907. It is quite usual for foreigners in Manila to rent apartments and engage their own servants. Livery rigs (*carramatos*) are rented at fifty cents an hour.

Manila affords much sight-seeing. Its walls and battlements would render a European city world-famous. Apart from the evidences of Spanish colonization it possesses an individuality all its own. Suppose a district of Manila were to be transported to the midst of some American city, what a commotion would arise! People would gape at the traces of Spain everywhere, the narrow streets, the overhanging houses, the loaded *carretellas* with the pony trying hard to keep his feet on the ground, the slow-going carabao,



THE MANILA OF TO-DAY

Ice plant—Government laboratory—The Escolta, the principal business street—The Escolta before the advent of electricity

the little brown children dressed in nature's own, the *dulce* baskets with their collection of sweets, the crooked *esteros*, or creeks, with teeming traffic and brookside laundries, the straight-shouldered and bare-footed women, the picturesque nipa bungalows in the native quarter, the miscellaneous *tiendas*, or stores, and everywhere the idle, happy crowds, apparently waiting for some one to run over them.

Parts of Manila remind one of Venice, — the arched bridges, the huge walls of stone with steps leading down to the water, the winding Pasig with its river life. More than fifteen thousand souls live their lives upon the river boats. The most interesting portion of Manila is, perhaps, the famous Walled City, Intramuros, which is one of the most perfect examples of a fortified city of the seventeenth century. Here is an amazing collection of objects of historical and antiquarian interest. There are, it may be observed, almost enough old churches and convents and libraries in the islands to scatter well over a continent. The churches of the Walled City are its glory. Over half of the area within the walls is Church property; this alone may indicate something of the vast importance of the Church in Spanish days. The great Cathedral is comparatively new, but imposing to a degree. Santo Domingo is the only Gothic church in the city. The Jesuit Church excels in beautiful carved woods, and has a fine museum. The Augustinian Church is the oldest in the islands, and stands as it was completed in 1605, with its vault of hewn

stone and its enormous walls, which for three hundred years have stood proof against all storms and earthquakes.

Wonderful secrets these old cathedrals might tell! Once near Manila we visited, with the attendant padre, a Franciscan Cathedral. In a cool dark attic beneath its eaves we saw enormous chests filled with treasure that Midas might have envied. There were images of gleaming, solid, yellow gold, eighteen inches to two feet in height; there was a wine service brought out by the lonely galleon which travelled the little-known seas from New Spain; there were goblets innumerable, and candelabra, and plates, and crucifixes, and maces, all of solid yellow gold, exquisitely carved, that possibly for generations no layman's eyes but ours had looked upon. Few know of the treats that may reward the interested tourist. The convents attached to these churches present many objects of interest: libraries old and curious, with hand-painted books dating back to 1545; paintings so old that only a brown blur remains; organs mute with age; scarred walls, and dreamy gardens, and relics, and images, and saints, and shrines, and colonnades, and broad *salas*, and spacious *cuartos* abound; and a benediction seems to steal over the visitor from the walls, which reflect to-day the sixteenth century.

Construction work on the walls of the Intramuros began not less than two hundred and sixty years ago. The first stones for Fort Santiago, at the mouth of Manila Bay, were laid in 1591

The Government is planning and has already completed many great architectural achievements. Mr. D. H. Burnham several years ago visited Manila at the suggestion of Secretary Taft; and his plans, which are now being carried out by Mr. William Edward Parsons, architect of the Civil Government, will make Manila one of the most beautiful cities in the world. These plans are being carried out with a commercial as well as an artistic object.

“It is important that in a city like Manila, which contains so many beautiful and historical monuments of Spanish times, the preservation of these monuments be combined with the general scheme of development. . . .

“The Spanish seem to have had a distinct architectural sense, a sense which combined the artistic with the ordinary. They have left many excellent examples of the grouping of public buildings. There the church and convent form one side of the square, the municipal buildings another, and the school buildings on the front. This was the general effect, but with a variety of treatment. In the haste and rush to erect public buildings in the United States the first available site is used. This error is being felt in American cities. We are not incapable of importing architecture from foreign countries, such as the Gothic, Elizabethan, Louis XVI, and Italian Renaissance. But the Philippines have an architecture of their own, — the spreading eaves, the overhanging second stories, the shell windows which prevent the glare of the sun which comes through ordinary glass, the buttressed walls, and the floors of solid mahogany planks, have all contributed to produce a style of architecture particularly Filipino.”¹

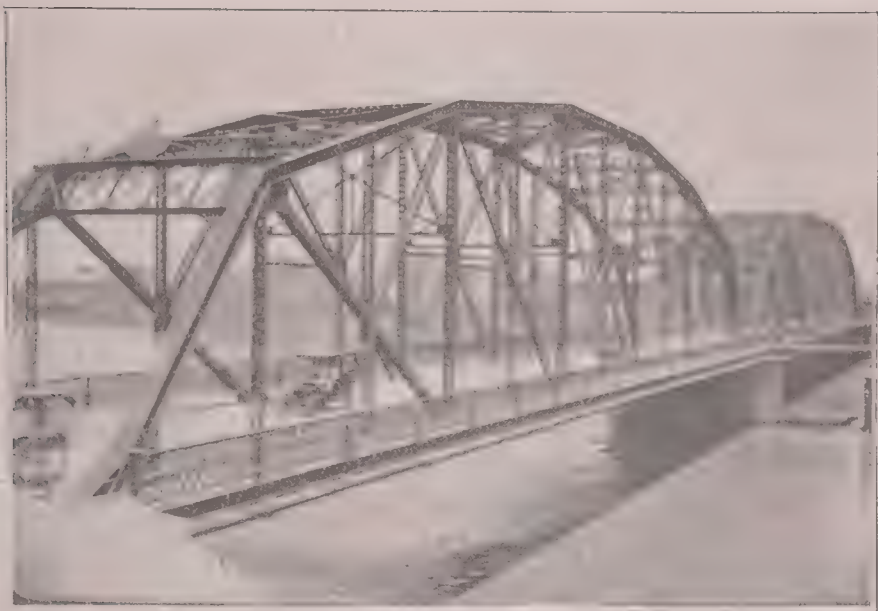
¹ William Edward Parsons.

Manila to-day is generally accounted by far the most beautiful city in the Orient. The Luneta, or Park and boulevard combined, with its view of the harbor, shipping, and the Mountains of Mariveles, is a constant attraction. Already the Luneta at evening presents a panorama which one may see nowhere else in the world. Thousands of people every evening drive upon the boulevard in their *carromatos*, or two-wheeled covered buggies, drawn by Filipino ponies. The music, the people in their white suits visiting and chatting, and the lights of the *carromatos* darting like thousands of fire-flies, make a gay scene.

A trip up the Pasig River to the great fresh water lake, Laguna de Bay, is well worth while. Several fast steamers make the journey daily, stopping at numerous inland ports. The point of greatest interest on Laguna de Bay is perhaps Los Baños, possessing a modern hotel, where are located hot baths famous among the people for many generations.

Manila is the centre of many important social functions. The levees at the home of the Governor-General, with their dashes of official and military splendor, and the public receptions, balls, and other celebrations possess a stateliness, sparkle, and gaiety perhaps unequalled outside of European capitals.

The traveller naturally inquires, "What time of year should I visit Manila?" Before directly answering this question, let us consider the climatic conditions of the seasons, and recall some of the mistaken impressions that have generally prevailed in regard to the climate.



TYPICAL AMERICAN IMPROVEMENTS

Ayala bridge across the Pasig River, Manila — High-school building at
 Vigan — An American quarantine station near Mindanao
 — Home of an American school-teacher

Every prospective tourist, almost, has been more or less alarmed when considering a visit to Manila, by stories of the unbearable heat, the destructive typhoons, the fearful earthquakes, and the general dreary dead level of disease and death resulting from the pestilential climate. In truth no feature of life in the Philippines has been more maligned than the climate. Though indeed, extensive meteorological weather charts and reports have been made, these convey very little meaning to the lay reader, who wishes to know, most of all, what the climate is really like; how it feels to the pilgrim from the temperate zone.

Climate in general depends upon the temperature, humidity, purity, and movement of the air. There is in the Philippines a complete absence of extremes of temperature. Except at the highest altitudes frost is unknown, and in the very hottest places sunstroke is unheard of. The limit of the upward tendency of the thermometer is 100° Fahrenheit.¹ The total annual variation is not more than forty degrees. It is simply summer all the year, and nine months of it is a very pleasant summer. Broadly speaking, the climate is

¹ This statement will undoubtedly excite surprise; perhaps incredulity. Though the thermometer may for a few hours reach or exceed 100° Fahrenheit, yet we have never heard of it and it is probable such instances are comparatively rare. The daily annual mean is always much less than 100° Fahrenheit. The highest recorded temperature for a period of twenty-two years in Manila, as given by the Weather Bureau there, was 37.8° Centigrade [*i. e.*, 100.04° Fahrenheit] which was reached on May 23, 1889. *From Vol. I., page 104, Census of the Philippines.*

the most healthful and comfortable of any portion of the tropics inhabited by the white man. Compared in detail with that of New York, or Chicago, or St. Louis, it presents many good points and very few on the wrong side of the scale. "The fact is that no one ever deserts the Philippines for climatic reasons," says the "Manila Daily Commercial Bulletin."

December, January, and half of November and February furnish the most delightful climatic conditions in the world. During that time it is neither hot nor cold, but, as an old resident observes, "just right all the time." These, therefore, are months to be especially recommended to the tourist. "The very air breathes the luxury of non-resistance to nature, and if ever life is worth living anywhere it is here." Toward the first of March it begins to warm up. The thermometer daily climbs a little higher, and there may be a week when the noon time is suggestive of those hot spring days in the States, when the unaccustomed heat is hard to bear. Cooler days follow, and then warmer again; April and May are the hottest months of the year. But the aridity of the air in these months makes the heat comparatively easy to bear. Showers come in June, and the showery weather lasts till November. In the rainy season there is not a continuous downpour; there are many intervals of bright and pleasant days.

The characteristics of the weather in the various seasons as given above apply especially to Manila. They are not the same in other portions of the

archipelago, but the average probably does not vary much from this outline.

The tendency of many newcomers is to take very little or almost no physical exercise. Where it is so comfortable some feel invited to read a book or to dream in a shady nook, while others are disposed to partake unduly of alcoholic stimulants. A life of this sort almost invariably leads to an untuning of the system. Swimming, walking, horseback riding, tennis, golf, hunting, mountain climbing, and like exercises will keep one in tiptop physical condition, and can be done in great comfort at all seasons of the year. Common observation shows that people who lead active lives enjoy good health. American children develop faster and are stronger in the Philippines than almost anywhere else in the world. In fact the climate is to be accounted a great asset. During the fiscal year ending June 30, 1906, the death rate among American civilians living in the Philippines was only 9.34 per thousand, while the death rate among American soldiers was but 8.65.

A pleasant trip may be taken over the Manila and Dagupan railway to Dagupan, distance one hundred and twenty miles. It affords a characteristic panorama. The time required for the journey is eight hours, one train leaving in the early morning and the other about noon. The return trip is made the following day. There is a good hotel at Dagupan, in charge of an experienced American hotel manager.

If one has the time to continue further, the summer

capital of the Philippine Commission among the pines at Baguio, in Benguet Province, elevation about 5,000 feet, affords some enjoyable mountain views. There is quite a large community here, the hotel being under the same management as that at Dagupan. The climate is cool and bracing. The highest temperature recorded in 1906 was 81°, and the lowest 41° 40' Fahrenheit. It will soon be possible to reach Baguio in a single day. The concession of the Manila Railroad Company requires it to extend its railway northeasterly to "Camp One," where the Benguet road proper begins, and whence it climbs up the gorge to Baguio. It is expected that this extension will be completed during 1907. The road up the gorge, about twenty-four miles in length, is a marvel of engineering, aided by the use of steel and concrete. Ultimately an electric railway will doubtless climb from Camp One to Baguio.

Taal Volcano, rising from the midst of a lake of the same name in Southern Luzon, and about thirty-five miles from Manila in an air line, presents both an inspiring and a marvellously unique aspect. The volcano is active, having violently erupted a number of times in the past. The trip may be made easily at slight expense from Manila, there being a good road; or a river steamer may be taken to Calamba, a near point on Laguna de Bay, whence one travels overland ten or twelve miles. Arriving at Taal Lake one takes a boat for the volcano.

More extended views of the Philippines may be

had through travel on the inter-island steamers. Four lines being subsidized, steamers are now thoroughly modern in every respect, and only a reasonable charge is exacted for the transfer of freight or passengers. Most vessels leaving for the Sulu Islands, Zamboanga, and other Moro ports (all about five hundred miles south of Manila) stop also at Iloilo and Cebú. Comfortable accommodations render the trip exceedingly pleasant, and one will see more people of different tribes than could be encountered in a journey of similar length anywhere in the world. The round trip takes from ten days to three weeks. Government transports, coast-guard boats, constabulary and military steamers, as well as tramps, make the round of these ports. Permission for passage is obtained from the Quartermaster's Department, Manila.

Apart from the magnificent evidences of the old Spanish civilization — the superb cathedrals and engaging customs of the land — and aside from its unique presentation of a life midway between the Oriental and the Occidental, the archipelago presents an alluring invitation to the more adventurous traveller who would step from conventional paths into the little-known interior. Perhaps no country discloses to the traveller more diverse scenic charms than the Philippines; the resources of a vast continent appear to have been encompassed within them. Were these known, they would render the country a Mecca for the globe-trotter, and also for the tourist who delights in uncommon aspects of nature.

Travel in the interior is not attended with so many inconveniences as one would naturally expect, provided always that one is equipped as thoroughly as he would be if venturing off beaten paths elsewhere.

One can go throughout the entire islands in safety and comparative convenience without a guard of any kind. If the travelling be in the island of Luzon or any other of the large islands, except Mindanao, a trip can be arranged so that he will rarely be away from a constabulary post at night, and thus will almost always be within telegraphic communication with Manila. As there are no hotels except in Manila and its vicinity, the traveller will stop at the dwellings of the various *presidentés*, or mayors. He will never be required to pay for his board or lodging, and in fact will be treated as a distinguished guest. Presents for the wife of his host or the *niños* (children) would, however, be a most delicate attention. Many of the large companies in the Philippines, notably the Tabacalera Company, provide their agents with a special annual fund for the purpose of entertaining visitors, travellers, and wayfarers. The cost of a pack train in the interior is inconsiderable. Native ponies can be had at fifty cents a day each or less; four or five ponies will be necessary for two white men and their outfit. Ten cents' worth of rice straw (*palay*) at night keeps the horses in good condition, but they will thrive even without it. The cook, if he be an expert, will require fifteen dollars a month at the least, and the rest of the boys can be had at from five to eight



VIEWS IN MANILA

Post-office, showing modern vehicles — A street
in the walled city — View in the
Botanical Gardens

dollars a month. Thus one can travel all through the islands at a maximum expense of about three or four American dollars a day.

Some very attractive trips may be taken through the mountains of the interior in unbeaten paths, especially those that lead into the interchanging mountain regions; but the prospective traveller may search in vain for books which will impart an idea of this vast mountain country. These regions possess many temperate-zone characteristics, and afford a diversity of vistas and a variety of charms that baffle description. Every day is a delight. No temperate-zone mountain regions — not even those of California or Colorado — can vie with the superb beauties of the richly verdure-clad mountains. The interiors of Luzon, Mindanao, and some of the other islands, possess elevated plateau systems with great valleys and meadows that, without disparagement to the lower altitudes, may be truthfully described as a white man's country. Here the air is crisp and cool, even cold, sometimes, at night; succulent pasture grass knee-high springs densely from a soil rich and black as that of Canaan; mountain streams clear as crystal tumble through great forests and go gliding and winding through these vast wild pastures. Here the wild deer barks¹ to his mate at sundown and sets the country ringing as he emerges from the black woods that extend like little capes and

¹ The deer of the Philippines, instead of giving a bleating sound as do the American black-tailed, Virginia, and mule deer, gives a short, sharp, ringing bark.

promontories into the grassy meadows. Here the wild carabao, unhunted and unafraid, lopes with ungainly stride, though with amazing swiftness, into a covert; and the wild boar, weary of the hillside jungles, slips into the open and ploughs up the ground for the sweet grass roots.

The mountains which lead up to these plateaus, where rise great river systems, are frequently precipitous on their seacoast side. Thus in going over the lately constructed Benguet road to Baguio, a mountain resort on Luzon Island, the traveller finds himself at an altitude of 5000 feet within but a day's journey of the lowlands. The hills after an elevation of but 1500 or 2000 feet are covered with great pines and firs, which grow in park-like clumps or groves, and with occasional little forests in the gullies. Wild grass stands everywhere upon the steep mountainsides; when the wind blows, it ripples like a lake and shimmers like a sea of satin. It is nutritious, and makes good feed. The native saddle horse can get all the fodder he requires if hobbled with the bridle reins; he does not require a grazing rope. Thousands, possibly millions, of cattle could be pastured in these mountains. Often before reaching the mountain peaks the fine groves and open country of the slopes give way to dense semi-tropical jungles which crown the mist-clad summits. These jungles are characteristic of many interior lowland regions.

In these crowning jungles of the mountain tops the trail is often densely shaded by the foliage which

meets above. Huge trailing vines wave in the air like serpents about to strike; great tree-ferns sixty feet or more in height, barely raise their glorious crowns above the luxurious mass of growing things, and in the distance, in comparison with the huge groves of the forests, they seem but little larger than greenhouse plants. Numbers of exquisite flowering orchids, frequently of great size, and innumerable huge parasitic plants cling to almost every tree, or swing like hanging baskets from some thick vine that droops like a plummet line from a limb above. Enormous creepers, big as a man's thigh, wind like pythons around the giant trees of the mountain jungles.

Crossing the Caraballo Pass from Manila to interior Luzon in winter months (November, December, January, February) one comes into the clouds which hang above and on the east side of the summit of the range; going over six months later, at the time of the rainy season in Manila, one finds the clouds on the west side, and the dry season on the east side. Far below the hanging fog are the grassy hills and the groves and forests of pine.

As a rule, after one has attained the summit from the steep sides nearest the sea or seacoast plains, the mountains are not rugged, but roll up and wind away in great hummocks and billows. Ages of decayed vegetation have taken away the sharpness of their contour, except, perhaps, where in the higher reaches some rushing stream cuts a precipitous cleft. In

form the hills of interior Luzon, and of most of the other islands, suggest the rolling coast range of the Sierra Nevadas; resembling the Cumberland Mountains, though of greater fertility, they differ in that frequently they are not covered with much underbrush. The great ranges send out great circular hog-backs everywhere covered with the pines and grayish-barked hardwoods, and the great seas of grass which shimmer in the sun and roll in the wind.

A wagon journey through the provinces will always be of interest. Often for miles in the settled districts the road is like the main and only street of a Western mining town; it is a continuous settlement. Thousands of chickens, goats, sheep, and native cattle graze along the highway, which frequently is fenced off by bamboo, and serves as a public common. The few carabao that are not working chew their cud beneath the houses. In the early morning it is chilly. At dawn you will see the people gathering along the highway, chattering and shivering. Hundreds of people pass along the road; an endless procession of solid-wood-wheeled carts drawn by fast trotting oxen — sleek, fine cattle, graceful as deer and marked like Jerseys — flies past. By noon the avenue is deserted, save for the women carding their wool in the shade of the dwellings.

Before arriving at the Philippines one may order suits of white drill of the approved pattern. These are made up very cheaply in Japan or in Hong-Kong in twenty-four hours, and are readily furnished by any

of the tailoring shops in Manila. For travel in the provinces the following outfit is recommended: two wool blankets, two khaki suits, trousers with riding breeches, two suits underwear, two pair leather leggings, one pith hat, one felt hat, one green forester's suit (or other garment for dress occasions), tin knives, forks, plates, canned goods, one Colt's army forty-five revolver, one large calibre rifle (for deer, hogs, and buffalo), one shotgun (for birds), tin cases for camera films, one poncho or rain-proof garment. The traveller should remember that in remote regions, as in the United States, it is really safer to be without a revolver than with one. Except when hunting, our weapons have always been carried on the pack horse.

Excellent hunting can be had almost anywhere in the interior. The islands abound in deer and wild boar, and in interior Luzon there are wild carabao. The latter animals when wounded or shot at are very dangerous. Deer are run down and speared by natives mounted on fleet horses.

BIBLIOGRAPHY

There are no books containing much of the information here given.

CHAPTER XVII

PHILIPPINE IDEALS

OUTLINE OF TOPICS: National ideals and aspirations — Literacy of the masses — Their ignorance of republican government — America's part in their education in self-government — Obedience to superiors inculcated by Mahommedan priests and by Spaniards — Respect for constituted authority and for the educated — Desire for material prosperity — Influence of Christianity — Progressiveness of the educated — Industrial prosperity as a step to further ambitions — Dr. Rizal's attack on the priesthood — Notable Filipino authors, artists, jurists, and historians — Bibliography.

IN touching upon a nation's ideals one naturally first reverts to those in which all the people share alike. In a highly developed civilization, therefore, one is apt to emphasize national ideals as the most important, for these, being the mind of the people and common to all, have made the developed nation possible. Thus among the advanced nations those ideals that tend to perpetuate national unity are the most highly cherished. Patriotism, and the desire for prowess as a united people, — these are undoubtedly among the bulwarks of every foremost nation.

Measured in this way, Filipino ideals would be confusing to one not in sympathy with Filipino aspirations. The peasant loves his country with a passionate devotion. He is in love with the earth itself, the

rivers, the mountains, the palms and groves, the house where he has always lived, the church to which he has always gone, the village or community of which he is a part. The conviction within him that the land of his birth is the loveliest in the world is fundamental. Even the search for fortune, or for liberty itself, would scarcely impel him to leave it permanently.

To say that this people as a whole is lacking in noble aspirations, or is wanting in patriotism, would be to do it a great injustice, for it possesses in abundance those homely domestic virtues which are at once the foundation and the inspiration of the more civilized peoples. Love of home, family, and friends, which is the source of devotion to the community, is as general and developed among the Filipinos as among any race on the globe.

But the Filipino is not devoted to a form of government which his forefathers have handed down from generation to generation and perfected, nor may he profoundly reverence the achievements of his nation among the peoples of the world, and the stirring exploits of its rulers in the world's drama, for these have not been a part of his history. Whatever ideals the people possess may not, therefore, be termed national ideals, for they do not bear upon the general questions of national government. That this is true is not to be ascribed to an inherent fault in the people, but rather to their lack of knowledge and their division into many tribes speaking many dialects, which have rendered national unity impossible. Though a

surprising proportion¹ of the people are literate, their general knowledge is exceedingly circumscribed. Even if they can read and write a dialect, that dialect is limited to a small district, and they cannot be said to be in communication with the modern world at all.

The vast agricultural class, the "common people," — whom Abraham Lincoln once said God must love since he made so many of them, — comprising more than ninety per cent of the whole, do not think deeply upon the subject of governmental control. As we have noted, these people are simple, friendly, and very industrious for tropical workers. But they are mainly interested in purely local affairs, for their education heretofore has not tended to familiarize them with their country as a whole. They are of a common Malay stock, and, it may be added without the least disparagement to them, are totally unenlightened regarding the privileges or responsibilities of a republican form of government. They do not care particularly for independence as the Anglo-Saxon mind conceives it, for it heretofore has meant nothing to them. As an instance in point, it may be observed that some native filibusters who had been active in demanding independence during the insurrection, and who, in the immediate confusion following the war, had been illegally restrained in the prison of Bilibid, were not sufficiently informed of their constitutional

¹Forty-four per cent of the people over ten years of age are able to write some dialect, and over twenty per cent are able to read.

privilege to be released from unlawful imprisonment, nor were their lawyers, until advised by American attorneys, to exercise the inherent right of habeas corpus.

Although popular government has been unknown to the people of the Philippines, they are adapting themselves to American institutions not less readily than they have taken to various industrial innovations. In the light of what may be termed the new era, — the last few successful years of constructive effort, — the Filipino seems of an eminently practical turn of mind. He will absorb an ethical principle, an ideal of government; or, on the other hand, he will grasp a principle based on natural laws, if once he sees it in actual and successful application. Thus there are among the people as excellent provincial governors and *presidentés* (mayors) of cities as there are engineers, electricians, and mechanics.

A great degree of local autonomy has already been granted to the people; both municipal officials and provincial governors are chosen at biennial elections. The last election for municipal officers took place in December, 1905, and that for provincial governors in February, 1906; subsequent elections will be held every two years. In addition, a legislative assembly, which will provide a large measure of home rule, has been provided for. The first session of the assembly will be held in July, 1907.

These elections are a part of the Government's plan to train the people in the art of self-government. The

steps already taken allow complete local autonomy so far as municipal officers are concerned, and partial autonomy in provincial governments. The free choice of the provincial governor by the authorized electors of the province, and the election of all city officials, were preliminary experiments to the exercise of the more widely responsible duty, that of electing representatives to the legislative assembly.

The initiation of popular forms of government among an Oriental people is without parallel in the histories of the colonizing nations; it is an innovation in colonial administration. Naturally, so unusual a step has invited the critical attention of other nations. Many of those who have expressed the hope that the outcome might prove favorable have at the same time freely predicted its failure.

Yet, on the whole, it may be said that the elections afford gratifying evidence that progress is being made by the people in the art of self-government. "Undoubtedly, if there has been error it has not been in the danger of restriction, but rather in granting perhaps a larger measure of self-government than a people absolutely untrained in any of the functions of government were prepared for." The training that has come to the people has been invaluable. Notwithstanding embarrassments they are undoubtedly far better contented, and perhaps better governed, than would have been the case had the central authority exercised more rigid control and performed more entirely the functions of providing for local governments.



A GROUP OF MAYORS OF SMALL CITIES

Popular government, at the present time, presents many dangers. One of these is that intriguing, unworthy candidates, in their desire to become elected, may impose upon the people. In the old Spanish days the priests had the power to veto the election of an undesirable nominee for *presidenté* (mayor), and often the veto power was exercised in a salutary manner; but on the other hand, it exposed municipalities to the control of the ecclesiastics.

As a rule, the people are intensely interested in the elections. Once, in the provinces, we happened upon a remote *barrio* in which were seen no men. Upon inquiry it proved that the entire grown male population had gone to the nearest voting-place, eight miles distant. Interest such as this, upon the part of a people who for centuries have been the passive instruments of government administrators, is most promising. Of course, many irregularities occur, such as failure to qualify properly for registration. While many elections have been protested, the disposition of the minority to abide by the expressed will of the majority has not yet been questioned. The Filipino people have an inherent respect for government, and the will of their duly constituted superiors, that is more ancient than their association with Occidentals. For centuries their constituted rulers exacted from them implicit obedience. This spirit was more deeply inculcated by the Mohammedan priests, whose religion commands obedience, and later by the Spaniards, whose idea of conquest, in common with that of other

nations at that time, was the complete subjugation of the people.

A common desire, among rich and poor, highly educated and illiterate, is the desire for general material prosperity. They wish to see their wonderful country thriving, their children well clothed and raised in social station above the lowly position of their parents. These desires are fundamental in every native breast, and sometimes to an intense degree.

Though the people do not, as a whole, thoroughly appreciate the methods and objects of government, yet they are, collectively, as sensitive and responsive to the results of good, indifferent, or unworthy rule as they are individually to the personal slights or hardships that may be imposed upon them. Their admiration — almost reverence — for the more educated classes frequently renders them the pliable tools of some selfish agitator who seeks to stir up trouble for his own ends. On these occasions the simple peasant may be approached by an educated but low and cunning politician, who by threats and great promises induces the poor farmer to leave his farm. "Your stomach is empty. What you need is independence. Then you will have many carabaos and fields, and your stomach will be full. I am a great leader, a general; I am going to secure the independence of the Philippines and make myself Emperor of the Republic, and I will reward you; but if you do not follow me, we will come here and burn your house and kill all your cattle." This is,

of course, a hypothetical statement; but the line of argument is one which, to our knowledge, has more than once been used.

By similar threats various former bandits have recruited their forces. For this reason, although the proportion of crime is less in the Philippines than in the United States, many innocent peasants have been compelled to follow the standards of freebooters until the leaders have been dispersed by the Government. Often, too, when the prospect of political independence is presented as the fruit of that economic prosperity which the peasant so much desires, he has already become espoused to a cause which has not contributed to his well-being and which might have led to his death. But as soon as his leader disappears, he returns to his little farm and takes up the thread of life as before.

Any general estimate of the ambitions of the people must necessarily be inexact. The ambition varies with the individual. Yet among their ambitions we would place the following: to wear good clothes; to enjoy music, merry-making, and social gatherings; to live with parents, children, and relatives; to have plenty to eat; and to attain a higher social status through the acquisition of what may be termed literary attainments.

The reader has, no doubt, made mental note of the fact that in the creation of his desires the Filipino has been profoundly influenced by his association for more than three centuries with the Spanish. The necessity of labor has not been urged upon him as the means to

satisfy his personal ambitions, nor have the conditions of his life rendered such labor necessary. He has been taught, rather, to idealize the attainment of polished manners without really caring for useful knowledge, in the expectation that by this superficial accomplishment he would gain position, power, and wealth. When Spain was at the height of her influence her cavaliers thronged the islands; and chivalry, not industrial achievement, was the ideal of the cavaliers.

We have not here mentioned religion, believing this vitally important topic to be worthy of a separate chapter; yet the following observation of William H. Taft is of value in indicating the influence of Christianity in preparing the people for the introduction of American ideals of government:

“The ninety per cent of the Christian Filipinos who do not speak Spanish are really Christians. They are capable of education, and they have no caste or arbitrary customs which prevent their development along the lines of Christian civilization. They are merely in a state of Christian pupilage. They are imitative, they are glad to be educated, glad to study some language other than their own, and glad to follow European and American ideals. . . . They appreciate art; they appreciate statuary; they appreciate pictures. The capacity for developing skill is in this people. The children of the poorest and most ignorant learn with ease, and their parents are ambitious that they should learn.”

The *ilustrados*, or educated members of the community, are to be distinguished from the great body of the people. They are the ruling class, though there

is no caste, and no fixed feudal relation. The son of a peasant may by ability and perseverance join the ranks of the *ilustrados*, a term applied to this class by their poor and uneducated brethren. The *ilustrados* (known also as the *gente ilustrisima*), which compose much less than five per cent of the people, are in sympathy with American ideals, and frequently well informed as to American institutions. From this class are recruited the *presidentés* (mayors) of cities and the governors of provinces. The provincial governors are an exceptionally fine class of men, of wide sympathies, anxious to progress, and in constant touch with the Philippine Commission. To a great degree this is true of many of the municipal *presidentés*. All whom we have ever met realize the altruistic desires of the Americans. Indeed, after witnessing the efforts of army officers, school-teachers, Civil Government employees, constabulary officers, and business men, they could hardly fail to reach this conclusion.

The business community of the Philippines, inclusive of all nationalities, — Filipinos, Chinese, Germans, Spanish, English, and Americans, — is united. They do not desire any radical change of government. The Filipino business men are well content with the present system, and would view a change with alarm, being satisfied to wait for political independence until the people have demonstrated their capacity for complete self-government.

The one great ideal of the Filipino people to-day is, perhaps, the achievement of industrial prosperity.

They realize that upon this attainment depends the fulfilment of further ambitions. The following quotation from a recent issue of "*La Vida Filipina*," a native daily, anent the visit of an American who argued for vigorous development of the resources of the archipelago, is a characteristic utterance of the entire native press : —

"When Mr. X. solemnly affirmed before the Filipino Chamber of Commerce that united effort on the part of the business men and all those interested in the growth and well-being of a country has always and everywhere resulted in an increase of the prosperity of the entire community, he did nothing more than propound an axiom of political economy which requires no demonstration, and which constant and universal experience has confirmed and corroborated.

"Our material wealth contains every possibility of attaining vast proportions; but to-day, in its incipency and easily frightened, it has scarcely any importance. It is very painful to our patriotism, and at the same time very encouraging to our hopes, to have to admit that Mr. X. is wholly justified when he says that the Philippine Islands possess an inexhaustible source of wealth, and that instead of sending away from the islands those millions of pesos which leave us year after year, for the purpose of obtaining those products which might easily be purchased at home, the latter should be produced here, thus keeping all this money in the country and in circulation among the people.

"The noble example of all that has been attempted and all that has been achieved in industry elsewhere, by encouraging and stimulating the spirit of coöperation and enterprise, shows us to what point we may hope and



A GROUP OF PROVINCIAL GOVERNORS

expect to arrive here in the Philippines, provided all good patriots, . . . in view of the supreme interest of the country, will but unite their efforts in the task of exploiting the material wealth necessary to every people that aspires to be truly free.

“Every good Filipino patriot should lend a willing, and even an enthusiastic, ear to these strangers, who come to our shores to disseminate ideas and plans for our general betterment.

“Let us not forget the disinterested words of Mr. X., and let us all, in imitation of the lowly ants, carry our grain of sand to the common pile of *our material prosperity, which is also that of our most cherished ideals.*”

To render great honor and devotion to the memory of their patriots is a universal desire among the people of the Philippines. Foremost of those who have yielded their lives in the cause of the oppressed, is perhaps the lamented Dr. José Rizal y Mercado, a man of brilliant intellectual attainments, great knowledge of the world, and deep sympathies with his people, who met a glorious martyrdom at the importunity of the friars, on December 30, 1896. Dr. Rizal was a native of Calamba, a small community in Laguna Province about three hours' journey from Manila. His father was a Filipino of some means and attainments, who sent the boy, as an extreme youth, to the Jesuits' school in Manila. Dr. Rizal subsequently entered Madrid University, from which he graduated with high honors as a Doctor of Medicine and Philosophy. Later he studied in Paris and in German universities, where, notwithstanding the difficulty of

mastering a foreign language, he secured further degrees. Although a Catholic, he had greatly resented the position of the Church in governmental affairs. To awake his people to a condition that to him, at least, seemed unbearable, he wrote and had published while in Germany a Spanish novel, "Noli me Tangere," couched in that grace of speech in which the educated Filipinos excel. This book was designed to disseminate in a popular form a knowledge of his country's unhappiness. In reality it was an attack on the priesthood, exposing their immoralities. We will not here pass upon the truth or falsity of the dreadful charges against the friars. Of their great work in bringing Christianity to the people, we have attempted some praise in another chapter.¹

Dr. Rizal, who had won fame as an oculist, published with similar intent another volume, "El Filibusterismo." Thus he became the leader of an anti-clerical party, which was regarded by the Spanish Government as highly dangerous and revolutionary. Early in 1893 he arrived in Hong-Kong, intending there to practise his profession. A letter from the supreme authorities summoned him to Manila, where he was immediately arrested and tried. Notwithstanding the extreme pressure brought to bear against him, so great was his popularity that instead of execution he was banished to Dapitan, a town on the island of Mindanao. Here he remained four years, when he volunteered as an army surgeon in the

¹ Chapter XIX, "Christianity in the Philippines."

Spanish Government service in Cuba, and his offer was accepted. Provided with a letter of recommendation from the well-known General Ramon Blanco, he was permitted to leave the Philippines. His enemies demanded his recall. On arrival in Singapore, Rizal was arrested, returned to Manila, summarily tried before a court martial, and publicly executed by order of General Polavieja in the presence of two thousand troops and an immense throng. The tragedy was heightened by the fact that but one hour before his death Dr. Rizal was married to Miss Josephine Taupner, the adopted daughter of a wealthy American resident of Hong-Kong, whose sight had been restored by the young martyr's genius. Rizal's execution was a great blunder, for he was beloved among all classes, even by many of those to whom his views were antagonistic.

Such a career as this could not fail to influence so reverential a people. The anniversary of Dr. Rizal's execution is a public holiday, and photographs of the young martyr are exhibited throughout the islands with those of Presidents Washington, McKinley, and Roosevelt.

Apart from the works of Dr. Rizal, which are very readable, no novel characteristic of the Philippines has yet been written. Nor have there been written works that have attracted wide attention throughout the world. Yet the people, when educated, develop literary tastes. In their writings and documents, and in the daily press, they display a carefulness in the

use of words, and a grace and balance in their periods, which are not generally considered essential among a commercially disposed people.

Vicente Francisco, a promising Filipino youth, exhibited some excellent sculpture in the Madrid Exposition, 1887. Some admirable statuary wood carvings were shown at the St. Louis Exposition in 1904. In painting, the islands have produced at least one artist whose works have aroused wide and favorable attention in Madrid and other European centres. They have produced several vocalists, one of whom attained wide reputation in Europe; also some extremely capable and learned jurists who are acknowledged by their American associates as unsurpassed in their field. Chief Justice Cayetano Arellano, of the Supreme Court of the Philippines, is accounted by his *confrères* of the bench as the acknowledged leader of the judiciary. Attorney-General Gregorio Aretana has attained wide reputation as an advocate.

In fact, such has been the learning and the high reputation which the law as a profession has for many generations attained, among the Filipinos, that many of their attorneys have successfully crossed swords with the most distinguished lawyers of Spain. Among names which have won a reputation for integrity, knowledge of the law, and professional abilities may be mentioned those of Judges Ignacio Villamor, Manuel Araullo, Felix M. Rojas, all of the Court of First Instance, and many others. It is a commentary

upon the confidence of the Government in the ability and worth of native jurists that out of sixty-three high judicial positions more than half are filled by Filipinos.

BIBLIOGRAPHY

The best written evidence of Filipino character and ideals is assuredly to be found among the many documents written by the people themselves. A large number of translations have been published by the Government; undoubtedly access to such documents may be gained through the Secretary of the Interior, Manila, P. I. Other authorities are: "Archivo del Bibliófilo Filipino," Vol. III, Manila; "Catálogo abreviado de la biblioteca Filipino" (a short catalogue of Philippine bibliography), by Retana, published Madrid, 1898 (it can be gotten in Manila); "Churchill's Voyages," Vol. IV; and "The Story of the Philippines," Amos K. Fisk, New York, 1898.

CHAPTER XVIII

OBSERVATIONS AND BITS OF TRAVEL

OUTLINE OF TOPICS: The connection between Christianity and the respect paid to woman in the Philippines — Parsimoniousness of many of the women — Common-law marriages — The rarity of prostitution — Devotion of the Filipina to her household, and to her husband's interests — Characteristics of various tribes — Hospitality to travellers — Mission of the Filipinos probably to Christianize the Orient — Mission of United States Government in the Philippines to prepare the people for self-government — Desire of the Filipinos for independence.

“THE Filipina woman is unique among the women of the East in that she is free of foot and face and waist, and stands up and looks straight ahead without fear or fashion.”¹

The traveller in the Orient, if he be a careful student of the people, at once observes that the position of the Filipina woman is equal in every respect to that of the Filipino man. Her sex does not exclude her from privileges or opportunities for advancement that are open to her brothers, by whom her judgment and discretion are held in high regard. Assuredly there must be some relation between the facts that the Philippines is the only Christian country in all the Orient, and that the Filipinos are the only people of the Far East among whom women are held mentally the equals

¹ Editorial comment in “Manila Daily Commercial Bulletin.”

and morally the superiors of men. The practice of the Christian religion is undoubtedly responsible for the absence of rules discriminating against the female sex. It is certain, moreover, that respect for womankind is a trait innate in the character of the people; and it seems natural to assume that their ready acceptance of Christianity was aided by the open disposition which had brought them to esteem their wives and daughters. Even among the wild tribes the woman is as independent as the man, and excepting the Mohammedan Moros and a few tribes having a patriarchal organization, she is, as far as custom goes, a free agent.¹

In many parts of the country it is customary for the husband to turn over all his earnings to his wife, who is a remarkably thrifty and industrious helpmeet. Oftentimes she not only manages her own household, but directs the activities of her spouse. In many regions the Spanish and Americans arrange for the employment of the husband through the wife, and if she pledges that he shall go to work, the man is reasonably certain to report at the appointed time. Indeed, so

¹ Many have argued that the right of suffrage be extended to the women. Bishop Nozaleda, who lived in the Philippines for twenty-six years, goes even further: "The woman is better than the man here in every way,—in intelligence, in virtue, and in labor; to a great degree more economical. If any rights or privileges are to be granted to the natives, do not give them to the men, but to the women. . . . Every law of justice demands that even in political life they should have privileges over the men." The Bishop's conclusion is worthy of record. He says: "I must render just tribute to the American army here; I have noticed all along the consideration they have had for the women; it is worthy of comment."

saving are the women, and so desirous of obtaining a competence, that not infrequently they have been characterized as most penurious. Travellers and historians have frequently observed that in middle and old age the trait often becomes marked. For a pittance mothers and grandmothers have engaged their daughters to foreigners as mistresses under the guise of seamstresses and household servants. When this relationship ceased, the hand of the young woman would be eagerly sought in marriage by the native youths, who would consider that the girl had been more than ordinarily attractive to have won the favor of one of the superior race. Among her own people the relationship would not be concealed, but would become a matter of pride. If a child were born to the union, her happiness would be complete. The friars exerted great influence over the people, and they instructed their charges to bring them word of any couples living in a state of wedlock who had not been joined in formal ceremony; thus the performance of the marriage rite was always emphasized among the natives, who attach to it the greatest importance.

It would not be fair to judge the Orient by Western ideals. Those Filipinos who live in a state of consensual wedlock, or a permanent but unlawful relation, should not be regarded as immoral but as unmoral; the natives have simply not realized the necessity for a formal marriage contract. We mention the condition lest it may be carelessly and wrongly assumed that the people are regardless of chastity, a virtue upon which



NATIVE WOMEN AND CHILDREN

Igorrote women at work in the rice fields — Bicol school
children — A group of Bicol women,
Southern Luzon

their Christian teachings place great emphasis.¹ Although the standards in this regard are not so clearly defined as in the more civilized countries, yet it is amazing that the proportion of single persons in the Philippines (56.4 per cent of the total population) is less than that in the United States (57.9 per cent) or of any other known country where censuses have been taken, except British India, where the child marriages exceedingly limit the proportion of single persons. The addiction of women to a wrong life is practically unknown outside of European centres, and even in the few large cities, chiefly Manila, native women form but three-tenths of the total number so engaged. The fact that but one in 25,000 of the women is guilty is a wonderful commentary upon the purity of the Filipina woman; and this record cannot, so far as we can find from statistics or deduce from our observation, be duplicated anywhere in the world. All in all, the woman of the Philippines occupies a high position; her moral status and the moral status of the nation can in no wise be compared to those of the Japanese. Among the people a common-law marriage, though unusual, has much of the binding force of the ceremony. And the father or mother of children is fanatically jealous of the honor of his (or her) partner in wedlock. Many parents of large families in remote

¹ According to the census of 1902 the proportion of the consensually married to the total population was, among whites and natives, 7.9 per cent; among the native population it varies from 5.4 in Zambales Province to 1.8 in Pampanga Province, the average being under 3 per cent.

regions have been married by padres who learned that the marriage had not yet been consecrated. The proportion of illegitimate births among natives is less than in the United States; but between natives and whites it is somewhat greater.

The Filipina woman is deeply religious. She is devoted to her husband and children, and she is almost always busy. Her great influence in the home is, therefore, a moulding factor in the character of the people and in the future of the country. The nation consists essentially of homes, rather than of municipalities or of provinces. Indeed, in no other sense may the people be conceived of as having a common nationality, since members of the various tribes speak different dialects and are uninformed one as to another. In his home centres the life, and practically the whole range of thought, of the Filipino peasant. Without his home he would scarcely seem to belong to the Filipino race.

The following observations of various provincial governors (mostly natives), applying to the population in their respective jurisdictions, may throw considerable light upon the character and circumstances of the people.

“The people are of a cheerful and lively temperament, lovers of company, diversions, and pleasures. They preserve in its purity the faith and religion of their ancestors; they are temperate in eating, modest in dress, and simple in manner. They are pacific, mild, respectful, hospitable, and grateful to those who treat them well,

but very sensitive and silent and patient under mistreatment, and quarrelsome and vengeful when a good opportunity offers. They hope to secure self-government by pacific evolution from the proverbial disinterestedness of the magnanimity of Monroe." — Governor of Masbate Province (Tagalog dialect).

"A very notable characteristic of the people here is the aggressiveness displayed by the females, and their evident superiority over the males in business capacity. Whenever a family rises from the lower ranks of society to a position of comparative affluence and social importance, it is usually found to be due to the tact, energy, and close attention of the business member of the matrimonial partnership." — Governor Piemontel of Ambos Camarines Province (Bicol dialect).

"The population is divided into three social classes. The first is composed of families who on account of their wealth and culture enjoy a leisurely and independent position; the second class is composed for the most part of honest and industrious families possessed of small properties, who are very economical, and although having but little ambition, are lovers of order and hospitality. They are happy on account of having but few necessities, and enjoy a position relatively comfortable. The third class is formed of the poor, who are the farm laborers, servants, fishermen, etc. Their lack of education has created but few necessities, and they are therefore indolent. They are generally sober and strong. Most of them eat but twice a day; their food consists of corn meal cooked with water, and small salted fish. The average daily expense of a family in the country is about twenty-five cents (Mexican), while those in town live on from forty to fifty cents per day." — Governor of Negros Oriental Province.

“The wealth and poverty of the country are, as a rule, permanent. The former is the permanent condition, if so it can be called, of the higher class, which is the student and industrial class, because it pursues the ideal of living comfortably, luxuriously, and in pleasure. The upper class with a moderate fortune seldom is ruined, but on the contrary its fortune increases daily. The wealthy Filipino does not generally desire to undertake daring speculations. He is satisfied with gaining a little, and that little on a very safe basis. Almost all are engaged in agriculture. Poverty is the permanent characteristic of the working classes. There have been cases in which a laborer by constant labor, honest habits, and careful calculations finds himself possessed with an enviable competence.” — Governor of Negros Occidental Province (Visayan).

“The common people are given to credulity rather than superstition; they have great faith in the Catholic religion, some of whose saints are venerated with great devotion, the inhabitants of one pueblo making pilgrimage to others at the time of their religious feasts. They are as a class industrious, and the proportion of idlers and vagrants is very small indeed. The women are not only good helpmeets for the men, but compete with them, and at times, as in household industries and in small retail stores, surpass them.” — Governor of Cebú Province (Visayan).

“Due to the very primitive customs of the inhabitants, family relations are very close, to such an extent that many, even though they have married sons and daughters, do not permit them to leave home, and are very sorry to part from them if they do; so that it may very frequently be observed that in one house there live the grandparents, children, sons-in-law and daughters-in-law, and

nephews; and due also to this patriarchal custom the young girls are watched and advised by their near relatives. When they are ready to marry they contract the legal marriage before a priest of their religion, and frequently without leaving the house of their parents or the bosom of their families, by reason of such love.

“The use of alcoholic or other intoxicating beverages is not very general among the people. They bathe four or more times a week, changing clothing after every bath. Their houses are hardly a protection against the weather.” — Governor of Tarlac (Ilocano people, northwest coast of Luzon).

“The natives are always prone to abuse their authority, if some one here is not above them. They are terrible to their own people — very tyrants. The *presidentés* (mayors) of towns, who are natives themselves, hold their subordinates in terror. They govern by fear here.” — Bishop of Vigan (who lived for ten years among the Ilocanos).

Travelling through the Philippines one gets an idea of how the people really live. Once we came upon a little remote *barrio*, or settlement, in the interior, about four hundred miles by the crooked footpaths from Manila. The tropic night had just swooped down, and from the little native homes along the one street there came the yellow glint of the coco oil candles, and sounded thence the romantic tinkle of the mandolins. Hardly had our party gone half way down the street when we were addressed by an elderly Filipina woman.

“Good evening, Excellencies. Have you yet had

your suppers? Will you not honor me by feasting in my poor dwelling and remaining over night?"

The good woman explained that she was the wife of the *presidenté* of the settlement, who had gone eighteen miles away — a long journey — to attend an important lawsuit. In turn she introduced us to over twenty others who had gathered to bid the strangers welcome. Any one would have met the same welcome any day in the year. After supper what talking there was! The old lady — she was over seventy — had heard much about the Americans. They must be, she thought, a wonderful people. But did they, in building their railroads and great cities, think enough of their souls? For her part she felt the happiest time of life was when one gets old and may sit at night with the children and grandchildren about, and talk over the simple events of the day. She had never been to Manila, nor had she ever seen the ocean. But the steam cars were coming near that way. "Then," said the good wife of the *presidenté*, "then, señors, when the steam cars are accomplished, I shall visit the great city of Manila. My husband has a map showing where the steam cars shall run." As a girl, she had learned Spanish in a convent from a padre who was very wise and good. He had told her much of Spain and Europe; but she was getting too old to travel far. Besides, the *niños* (children) would forget her if she went away. No, she did not know much about the war, — in answer to our question, — but the insurgents had destroyed much of their

furniture and carried away the live stock. So we talked until after one o'clock. The old lady was an intelligent questioner, for her limited knowledge; and in return she described to us every tree and shrub in the locality; how many plants should be grown, and what was the profit in growing them. She turned occasionally to a bit of personal gossip.

In the morning she would set us fairly on our way. There were two roads, one of which was overflowed by rice paddies and swampy; the other road was dry. Justito Esteban would guide us. But Justito, though he had been over these roads many times, led us into an impenetrable morass, and then vanished. Hours were spent in toilsome wading and plodding through stagnant water. Finally there appeared a dry road, a great church spire in the distance, and, at length, another village. A little boy meets us on the village street and gravely conducts us to the home of the *presidentē* who is an *abogado* (lawyer). The advocate, a stoutish native man of fifty, who has just awakened from his siesta, shuffles out in his *panuelas* (slippers) to greet us, inviting us in with graciousness and turning our horses over to a couple of little serving-boys. No, indeed, he will respect our wishes and go to no trouble to prepare a meal. He has five daughters, whom he presents, and who sit shyly without uttering more than a monosyllabic yes or no. He informs us he wishes he had a son, and reads to us a point of law which evidently he has committed to memory, as the book is held upside down. In two hours he informs

us that a slight meal is ready. But we find it to be a bounteous repast, and we sit down with several neighbors around a generous board. Being advised to go no farther at the risk of offending our host, we remain during the night, having covered but five miles for the day's travel. Each day for months is a repetition of this hospitality, which never wearies.

What may be conceived as the mission of the Filipino people in the Orient? Toward the other Orientals they promise to have the power of exerting a peculiar and distinct influence. Representatives of the great Malay branch of the human family, whose daring navigators ventured in antiquity upon unknown seas in frail craft, and spread from southeastern Asia through all the vast archipelago we call Malaysia, they have in their blood the power of carrying to other peoples of the Orient those institutions which they themselves have received and made their own. Thus they, the only Christian Orientals, may at some far future date impress the great East with the most ethical of all religions, one that illuminates history and elevates mankind.

But first, and above all, the Filipino people have a mission unto themselves. As the individual may not attain to leadership among men until he has made the hard and persistent efforts that lead to achievement, so with the nation. The man who succeeds must work, and work hard, — not alone for the proceeds of the work, but as well for the invaluable discipline that attends the struggle for success. Material greatness

depends upon material prosperity, the prosperity that comes to a nation of achieving and united individuals. It depends, too, upon noble ideals and the possession of those elemental virtues to which the people of the Philippines are devoted.

The mission of the United States in the Philippines is clear: it is to develop in the humble peasant the desire for achievement, — a desire latent in his character though for centuries repressed; to show him how to work and to give him the opportunity to work, to protect him from designing or unscrupulous leaders, to enlighten him as to the responsibilities of free government, and to educate him personally in their exercise, so that at last he may stand before the world as a free and prosperous man who may bear his part and have a voice in the administration of his country. This volume is written with no purpose of proving the justness of our occupancy or of our subsequent course in the Philippines, yet every impartial observer must be impressed with the fact that there could not have been a more auspicious event in the people's history than their passing from the cruel misgovernment of Spain to the control of the nation which above all others has made sacrifices for the cause of human liberty, the abolition of slavery, and the happiness and prosperity of all. American administrators in the islands have been much hampered by unjust criticisms from those at home, who could not fully understand or appreciate the situation. This was particularly true in the early days of the military

occupation, when severity was necessary in order to establish the prestige of the American flag and to do away with the lawlessness that follows war. But now greater peace reigns in the country than in any former period of its history. The common people — the farmers and the fishermen — enjoy a greater degree of personal liberty than they have ever known. Their happiness does not depend upon the caprice of their immediate *principales*, since justice inheres in a stable government wherein all men are held equal before the law. It is true that previous to the American occupation there was great economic prosperity. But its advantages were enjoyed by a very limited class only. And the rising aspirations of the educated Filipinos were opposed by a reactionary party, who saw in the advancement of their charges the end of their domination. To-day events have raised the political and intellectual aspirations of the race. The ideas once held by an extreme few are being communicated to the mass of the people. The humble peasant now entertains the hope of social advancement for his children.

Perhaps we could mention no topic upon which there are more conflicting views, or one which presents a greater diversity of opinions — all of them backed by arguments more or less logical — than the subject of Philippine independence. We do not venture, however, to express an opinion as to the merits of these contested points, but rather present them all as impartially as possible. There are those who maintain that independence should not be



MUNICIPAL BUILDING, SANTA CRUZ, MARINDUQUE



PRESIDENTE'S (MAYOR'S) RESIDENCE

granted to the islands, but that they should speedily be made a Territory of the United States and possess the same privileges and opportunities as Alaska and Hawaii. On the other hand, there are those who assert that the United States has no rights in the Philippines, but should speedily evacuate, leaving the people to settle their own problems among themselves and with the nations of the world. Among this class are those who argue for immediate independence. These are insignificant as to numbers, and are composed of Americans in the United States who are opposed to the extension of the flag to foreign soil; and of a few influential but not wealthy Filipino journalists and lawyers, who generally have no financial stake in the country, but possibly expect that a radical change would result beneficially to them. As a class the wealthy Filipinos are extremely conservative, and would hesitate to adopt extreme measures of any kind. Then, too, there are those who believe that the American people are in sympathy with our course, and who desire to see the resources of the islands developed in a legitimate manner, and the people enlightened as to self-government, so that as rapidly as they demonstrate their fitness they may attain real industrial and political independence.

There is no doubt that the ambition of great numbers of the natives is for independence. This spirit is being largely fostered by American administrators, so that it will become general among the people, and they will realize what real independence

means. The educated class seem convinced that independence may be secured at the proper time by legal means, and are content with the present form of government. Almost the entire people would view with great alarm, if not with horror, the withdrawal of the United States, which would mean either internal dissension or their passing into the hands of a foreign power. Of course, this reference to possible internal dissension does not mean that the great mass of the people are naturally rebellious, but simply that, lacking a guiding and kindly hand, they would be commanded by dozens of ambitious leaders, each anxious to usurp supreme authority; for, the people being divided into many dialect-speaking tribes, they would not readily unite under any one leader. The majority of them, including a considerable portion of the upper classes, are totally ignorant of the responsibilities of self-government, and should they set up a republic, its government would be republican in name only. However, under a just and able — though stern — autocrat like President Diaz of Mexico, a nominal republic might possibly attain a great measure of success.

The natives are to-day deeply impressed with the sincerity and disinterestedness of their American administrators. The more intelligent, as a rule, realize that it will doubtless be many years before the United States can safely withdraw and leave the people with a safe government of their own; for it will, of course, take long to educate the great masses

of the people. It may take a generation or more, and it may take very much less time. No one really can say as to that. The success of the schools and elections is very gratifying; and not less important is the development of a communal sense of responsibility. However, all will be gratified when at length our mission has been accomplished, and we can leave safely with the people a form of government such as no Oriental country has before possessed, and which will be the fulfilment of the greater liberties for which they are hoping at the present time. Trusting to the United States, which is scrupulously fulfilling its obligations to the Philippines and to the world, the people are familiarizing themselves with the institutions of free government now provided them, and they will undoubtedly in time demonstrate their capacity for absolute home rule.¹

¹ The official expression of the American Administration in regard to independence will be found on page 414 of the Appendix to this volume.

CHAPTER XIX

CHRISTIANITY IN THE PHILIPPINES

OUTLINE OF TOPICS: The Spaniards' conquest of the Philippines contrasted with their conquests of Peru and Mexico — Willingness of the natives to embrace Christianity and Western customs — Beneficent work of the padres — Conquest by Mohammedans prevented by the opportune arrival of Legaspi — Effects of Mohammedanism on the Moros — The Moro *juramentado* — Mission work of the friars — Their opposition to the development of Philippine resources — Reasons for the people's dislike of them — Protestant churches — Bibliography.

ON the Luneta, the beautiful public boulevard of Manila, and overlooking the Bay of Manila, stands a striking monument in bronze.¹ The two figures, Legaspi, the founder of the present city, and Urdaneta, the Augustinian friar who accompanied him, are instinct with life and energy. Legaspi, on the right, bears in his left hand the standard of Spain; on the left and slightly in advance of Legaspi, Urdaneta carries in his right hand and immediately in front of the Spanish standard, the cross. This splendid and truthful work of

¹ Querol, a celebrated Spanish sculptor, designed the monument, which was cast in bronze and sent in pieces to Manila. When the American forces captured the city, the pieces of the monument were found in the custom house. General Davis, commanding the military Department of Manila, properly decided that it would be a graceful act on the part of the American authorities to erect the monument.



CHARACTERISTIC VIEWS

Street in Vigan, Northern Luzon — Monument to
Legaspi and Urdaneta — Interior of
the Cathedral, Manila

art "satisfies the sense of admiration that one feels in reading of the enterprise, courage, and fidelity to duty that distinguished those heroes of Spain who braved the then frightful dangers of the deep to carry Christianity and European civilization into the far-off Orient."

It was but natural that so susceptible a people as the Filipinos capitulated to the devout spirit in which the early missionaries undertook the Christian conquest of the Philippines. The occupation of the country was not in the least like the conquests of Pizarro and Cortez: the natives were treated with great kindness and consideration; the priests exerted every effort to conciliate them. When Legaspi entered into negotiations with the native peoples, he found that there was no other government than that of many petty rulers; and these, being jealous of one another, were easily induced to acknowledge allegiance to the King of Spain, and were thus quickly brought under the influence of the active missionary efforts of the friars who accompanied Legaspi. "The willingness of the natives to embrace Christianity, their gentle natures, and their love of the solemn and beautiful ceremonies of the Catholic Church enabled the friars to spread Christianity through the islands with remarkable rapidity." "History affords few instances in which sovereignty was extended over so large a territory and so many people with less bloodshed."

The priests of Spain penetrated to the utmost parts of the Philippine Archipelago, carrying the Christian

religion and bringing with them its symbols in the form of some of the most exquisite edifices that are to be found anywhere in the world. A few years ago a widely known explorer visited the Philippines to secure material for a book of travel in the interests of a prominent publishing house. In travelling through the interior of Mindanao he reached a point where, he wrote in his diary, no white man had before penetrated. Turning a bend in the stream which he was following, he there came upon a mission building surrounded by a few lowly dwellings in the midst of the forest and attended by an aged Spanish padre. Thus the devout padres extended their labors into the most remote portions of the archipelago and to the lowliest of all the people.

More than nine-tenths of the entire population, including the Moros (Mohammedan Malays) and pagan tribes, are Christians. To-day these Christian people are unique among all the races of the East. They are an Oriental people with the religious ideals of the Occident, and are, by virtue of these ideals, closer to the white race than any other Orientals. Their faces are turned to the West; and as they develop in material ways and become better educated, the differences between them and the peoples of the Occident are not heightened but subdued, since the greatest differences between the races are not physical, but are founded on ideals and customs. "They have among them no traditions which prevent the development of the people along European and American lines. Their Christian

education has led them to embrace, when sufficiently educated, European and American ideals. Those who are educated and wealthy among them adopt European customs, European dress, European manners, with eagerness.”¹

When it is taken into consideration that the number of padres was inconsiderable as compared with the vast population they Christianized, their influence toward a higher standard of living seems amazing. Those worthy men taught the people to lay out town sites, to build churches, roads, and bridges; they ministered to the sick and needy, and instructed them in hygiene and the cure of diseases. They introduced new fruits and vegetables and encouraged their planting. In fact, there are many gardens cultivated under direction of the priests at the present time. They exerted their influence for humility, gentleness, and truthfulness among their flocks. There is no native who does not owe much to their advice and ministrations. The padres frequently are men of great enterprise and resolution. The finest roads and trails in interior Luzon are those built under the direction of Padre Juan de Villaverde. They extend through the hills in every direction; and though it is more than a decade since the worthy padre died, they are still kept in good repair by the people whom he taught to labor upon them.

Beyond all comparison Christianity is the most priceless heritage that ever could have been, or ever

¹ Wm. H. Taft, 1902.

will be, brought to the Filipino people through contact with other races. The circumstances of the early Christian conquest bring to the Christian religion in the Philippines an especial significance. When the Spanish took possession of Manila, Mohammedan missionaries, who had already reached to the uttermost parts of the Malay Archipelago, had extended their field of endeavor from Mindanao, Sulu, and the southern Philippines to Manila Bay. The advent of the Mohammedan priests was probably very recent at the time of Legaspi's arrival, for the number of their converts was inconsiderable. Indeed, the Moros had not arrived in sufficient numbers to have conquered the then small Tagalog population of Manila.

“Undoubtedly, if Legaspi had at that time not come into the islands, all the people of the archipelago, instead of only five per cent of them, would now have been Mohammedan. . . . It should be borne in mind that these are a Malay people, and that nowhere in the world, except in the Philippine Islands, has the Malay been made a Christian. In other places where the race abides, Mohammedanism has become its religion; and there is no condition of mind which offers such resistance to the inculcating of Christianity as that found in the followers of the Prophet of Mecca.”

Had Mohammedanism become the dominant religion of the Philippines, their history would have been one of bloodshed instead of comparative peace. Mohammedanism among the Philippine Malays, possibly more than anywhere else, has instilled into the

minds of the people a disposition toward continued warfare. Students of Islamism have detected many changes in the faith as practised by the most enlightened Mohammedans and by many of the Moro tribes. Mohammedanism appeals to violent and fanatical impulses rather than to the gentle nature of the Malay. Perhaps we cannot better explain the effect of Mohammedanism upon the Moro than by quoting from a recent article by the author in a New York journal.¹

“The Moro is a Mohammedan, but he has perverted the Mohammedan belief until at times it is a weird, grotesque, and terrible religion. In the heart of the Moro there is no fear of death; it is to him but an incident of life; and his belief, as he has fashioned it, is that he who dies in battle is cleansed from sin and goes straight to the bosoms of the houris in paradise. The Moro’s idea of government is force; he has never known anything else; if you are kind to him he thinks you fear him. His world is ruled by fear, not love. He has no definite comprehension of abstract principles of government, nor does he appreciate an absent government. His allegiance is personal, and it is paid to the *datto* or American officer with whom he comes in daily contact. This disposition to personal allegiance has been handed down to him through legions of *dattos*, or feudal chieftains. Until the American occupation, these dattos were continually at war with each other; and it is largely through this lack of unity that the Moros never subjugated much of the territory beyond the country in which they lived. Their wars with the Filipinos, the peaceable Christian tribes who live hundreds of miles to the north,

¹ “Leslie’s Weekly.”

were confined to acts of piracy and raiding. His religion, as set forth in the Koran, tells the Moro he must obey without question his duly constituted superiors. But the Moro is impressionable, and under rigid personal leadership makes a faithful servant. For this reason the Moros of the island of Mindanao, who have been thoroughly conquered and subjugated, will make and are making excellent citizens, while the Moros of the little island of Sulu, never having been decisively defeated by the Spaniards, knew no law but that of their dattos. Under bad dattos they are bad men, but under good dattos they may be good men. These men were a bad lot [speaking of Moro bandits slain on Dajo Crater, March, 1906], and it is unfair to judge the average Moro by them.

“The Moro is subject, when not under the influence of a self-contained ruler, to strange, murderous fits of insanity. When a Moro, without effort on his part, becomes seized with a desire to murder, he is said to have “run amuck,” and at such times he will rush wildly, slashing and killing every one he chances to meet, even his own people. When, however, he purposely works himself into a religious frenzy, it is with the desire to kill Christians, and, by the faith of the prophet, ascend forthwith into paradise. The Moro in this state of passion is said to be *juramentado*. He has then taken a religious oath, perhaps administered by some sacred *hadji* who has duly made his pilgrimage to Mecca; he has bound himself up so that he suffers excruciating agonies, and through physical suffering is reduced to a nervous frenzy. Having once taken the oath, the Moro *juramentado* is doomed to slay until at last he himself is slain. Here in Jolo, since the American occupation, a man went *juramentado* while the American band was playing on the plaza. In shooting the Moro, who had



CHARACTERISTIC TYPES

A Moro datto and his retinue — Moro girl embarking in a native boat
 — A Negrito boy — Children of the Igorrotes,
 Nueva Viscaya Province

mingled with the soldiers, a soldier was slightly injured, and a musician who was playing the trombone had his instrument perforated in several places. A Spanish general, who was troubled by having his soldiers killed by juramentados, about twenty years ago, shelled the residence of the Sultan with field-guns. The Sultan, who was absent at the time of the shelling, rushed into Jolo, saying: 'General, your soldiers are killing my people. Stop them!' 'I cannot stop them, as they have gone juramentado,' replied the general. He had no more trouble with juramentados."

Mohammedanism, however, has been confined to a small population in a remote section of the country. In contrast is the spirit induced by Christianity and the confidence which the people have in their Christian leaders. "So great and complete became the control which the friars exercised over the natives by reason of their sincere devotion to their interests, that Spain found it possible to police the islands with very few people." In 1600 the Spanish military force was 470 officers and men; in 1636 it was 1762 Spaniards and 140 Filipino soldiers; from 1828 to 1896 the Spanish forces varied from 1,000 to 3,000 officers and men.

Throughout the islands the Spanish padres established convents and institutions of learning. Hospitals for clergy, indigent natives, sailors, and others were early founded in Manila, Cavite, Pila, Los Banos, Nueva Caceres and many other cities. Between 1591 and 1615 the friars had sent missionaries to Japan to succor the poor and the lepers of that country, so that there were in Japan when the ports

of that country were closed about thirty-two priests, of whom twenty-six were crucified or burned alive. When the Mikado expelled the Christians, he sent to the Governor-General of the Philippines three junks laden with 150 lepers, with a letter in which he stated that as the Spanish friars were so anxious to provide for the poor and afflicted, he sent them men who were really sorely oppressed. These unfortunates were cared for at the hospital of San Lazaro, Manila, which has ever since been used for lepers.

Speaking of what the friars accomplished, Captain John R. M. Taylor, Fourteenth Infantry, U.S.A., says:

“To accomplish these results required untiring energy and a high enthusiasm among the missionaries, in whom the fierce fires of religious ardor must have consumed many of the more kindly attributes of humanity. Men who had lived among savages, trying to teach them the advantages of peace and the reasonableness of a higher life, who had lived among them speaking their tongues until they had almost forgotten their own, must have felt, when promoted to the higher places in the religious hierarchy, that their sole duty was to increase the boundaries of the vineyard in which they had worked so long. Spain had ceased to be everything to them; their order was their country, and the cure of souls and the accumulation of means for the cure of souls was the truest patriotism. . . . They were shepherds of a very erring flock. Spanish officials came and went, but the ministers of the Church remained; and, as they grew to be interpreters of the wants of the people, and in many cases their protectors against spoliation, power fell into their hands.”

In an address at Notre Dame University, October, 1904, the Hon. Wm. H. Taft throws a judicial light on the work of the friars in the Philippines, the veneration in which they have been and, indeed, are now, in the case of the few that remain, held by the people, and the causes which led to the hostility toward the religious orders.

“The influence of the friars was thrown against the investigation and development of the resources of the Philippines. The priests reasoned that the working of the mines in Peru and Mexico had meant suffering and death to many of the natives, and that it was better to let the mines in the Philippines, if mines they were, lie unopened. Few Spanish merchants lived permanently in the islands, and these were chiefly engaged in the transshipment of Asiatic merchandise from Manila, and had but little interest in Philippine products. The internal development of the islands was neglected. Taxes were light, and there was little money to make improvements or to establish schools. One Spanish-speaking priest among three or four thousand natives could not do much in spreading the knowledge of the language. To know Spanish meant contact with the outside world, and the priests feared — not civilization, but the evils of civilization. Modern material progress seemed to the Spanish missionaries of little worth, compared with keeping their people innocent.”

Mr. Taft here comments on the fact that, notwithstanding the policy of the friars, they founded many excellent institutions of high learning, one of which is older than either Harvard or Yale.

“How has it come about that the Philippine people now manifest such hostility to those who were for 250 years their sincere and earnest friends, benefactors, and protectors? There were several causes for the change. The intimate affectionate relations existing between the friars and their native parishioners had led to the education of natives as priests, and to the acceptance of some of them as members of the religious orders. Before 1800, of the bishops and archbishops who had been appointed in the islands, twelve were natives; but after the first years of the nineteenth century no such places of preferment were offered them, and after 1832 they were not allowed to become members of the religious orders. This change of policy created a cleavage between the native clergy and the friars, which gradually widened. The inevitable result of this policy, as soon as any small percentage of the Philippine people passed out from under the pupilage of the Spanish friars, was to create an opposition to them among the people.

“Secondly, the friars had become, generally by purchase, large landowners. They held land enough to make up 250,000 acres in the Tagalog provinces in the immediate neighborhood of Manila. This land, which was rented by them to thousands of tenants, was the best cultivated land in the islands, and was admirably suited for the cheap conveyance of the crops to market. Charges were made that the friars were collecting exorbitant rents; and other difficulties arose, which, however free from blame the friars may have been, contributed very decidedly to the growing feeling on the part of the native people against their former friends and protectors.”

But the fact that the friars were induced to act on behalf of the Government was perhaps the greatest cause of difficulty. Mr. Taft observes:

"The Spanish Government looked to the Spanish friars, because of their intimacy with the people and control over them, to do what was necessary in ferreting out sedition or treason, supposed to be then rife. By custom, and subsequently by law, to the parish priest was given complete supervisory power over the municipal government of his town. His civil functions became very many, and one of his chief duties was supposed by the people to be to report to the central Government at Manila the persons in his parish whose political views or actions were hostile to the Spanish *régime*. The friars thus became involved in a reactionary policy, which placed them in opposition to the people, and made them responsible in the popular mind for the severity with which the Spanish Government punished those suspected of liberal political opinions. So bitter did the feeling become that in the revolution of 1898 there were forty friars killed and three hundred imprisoned; and the latter were released only by the advance of the American forces and the capture of the towns in which they were confined."

There are no more devout people than the people of the Philippines. Religious worship obtains among all classes. A place of worship is an essential to the life of the people. In every Filipino community, however humble, is to be found a house of worship. Often in newly established districts, where the long journey to the superb churches built under direction of the padres would be impossible, the people have of their own accord erected less pretentious religious edifices, sometimes built merely of thatch and bamboo. Religious work is in charge of the various Catholic

orders, there being at the present time a large number of native as well as Spanish priests.

Though almost the entire population profess the Roman Catholic belief, yet Protestantism has made some advance since the American occupation. When the Civil Commission came into power, July 4, 1901, it was unlawful for any church other than the Roman Catholic to own any piece of real estate. One of the first edicts of the new legislative body, in pursuance of the constitutional American right of freedom of religious worship, was the passage of a law allowing Protestant churches to purchase and own real property.

No effort, it is maintained, is made to win proselytes from the Roman Church, which has so magnificently fulfilled its religious pledges in the islands. And in fact with so broad a field the work of both Protestant and Catholic denominations is extending. The missionaries of the Protestant churches have rather pursued their efforts in other lines. It is believed by the missionaries that Protestantism offers advantages in many communities, since it maintains principles that are especially fitting at this time, among these being patriotism, discipline, industry, and freedom from superstition. A departure from the Catholic Church known as the Aglipay, and composed of those who have been groping for a new faith, has, to a large extent, recruited the ranks of the Protestants. Among Protestant churches represented are Presbyterian, Methodist, United Brethren, Baptist, Disciples, Congregational, and Episcopal. A large number of church



TYPES OF OLD SPANISH CATHEDRALS

edifices have been erected. One of these, it is interesting to note, — St. Mary's and St. John's Cathedral (Episcopal), Manila — is built of reinforced concrete. The works undertaken by the Protestant churches include day and night schools, hospitals, training schools, Bible institutes, schools for orphans, printing schools, manual-training schools, training farm, saw mill.

Seven of the Protestant churches have joined in the Evangelical Union, through which, outside of Manila, each church confines its labors to a specified territory. In this manner each church has the widest possible field.

There are now at work under the different Protestant churches in the Philippines 105 American missionaries, 422 native preachers and evangelists, and about 30,000 members. There are 16 schools, 9 hospitals, and about 20 dormitories, 263 church organizations, 198 church buildings, and 3 publishing houses. The total circulation of the Scriptures has reached the million mark, and the workers feel that, for the six years since the inauguration of the enterprise, the results have surpassed those attained in any other mission field.

BIBLIOGRAPHY

"Studies of the Philippine Islands" (in Spanish), by the Augustinian historian, Father Martínez de Zúñiga. "History of the Population," by Dr. David P. Barrows, in Vol. I, Philippine Census. "The Philippine Islands," Legaspi (Spanish).

CHAPTER XX

PHILIPPINE COMMERCE

OUTLINE OF TOPICS: Opportunities for American goods in the Philippines — Imports and Exports — Chances for new lines of American goods — American importers in the Philippines — Differences to be noted in character of goods for temperate and tropical Orient — Steps which the American manufacturer should take to sell his goods: preparation of catalogues; shipping; packing of goods — Customs requirements — Possibilities of a mail-order business — Opportunities to introduce Philippine products into this country — Bibliography.

PRESENT developments would seem to render the Philippines a most inviting commercial field. Possibly no other Oriental country nor any Latin-American country presents more favorable opportunities for the extension of American trade and the investment of American capital than do these islands. The advantages they offer to the American manufacturer must be apparent to the most inexperienced observer. The people, under American government and in constant association with Americans, are rapidly adopting our ways and customs, and learning to prefer our wares. There is already a market for many kinds of American goods; and the further development of the islands will demand great quantities of manufactures in which the United States excels. This is especially true of agricultural,

mining, and lumbering machinery. The American manufacturer finds American importers already established throughout the archipelago, and this ready market for his goods will be appreciated by every exporter who has sought in vain, and often at some expense, to secure a foreign representative in Oriental and South American ports. The Philippine archipelago is the single tropical region in which American business interests may be said to have gained a position approximating a substantial foothold and unthreatened by serious competition. To-day we are supplying twenty per cent of the imports of the Philippines, as against three per cent in Spanish times, and the total commerce is much greater than in Spanish days. (See Appendix.)

The total commerce of the Philippines amounts to more than \$63,000,000 a year, the imports being more than \$30,000,000, and the exports about \$33,500,000.¹ Of the imports in 1905 the Philippines took from the United States about \$5,500,000 worth of goods; of the exports nearly one-half, consisting almost entirely of hemp, were sent to the United States. More than \$8,000,000 worth of exports went to England, while several other countries each received between two and three million dollars' worth. Hemp is the largest export, amounting to over \$22,000,000; sugar aggregates \$5,000,000; tobacco and copra, respectively, rank next.

¹ For 1905, and may be taken as about the mean average of recent years.

The line of manufactured goods in which we are now making progress in Philippine trade includes iron and steel machinery of many kinds, electrical machinery, stationary engines, typewriters, pumps and pumping machinery, structural iron and steel, wire and wire cables, tools, agricultural implements, nails, pipes, fittings. The United States is practically the exclusive source for the supply of raw cotton, boots and shoes, whiskey, and, until recently, of beer. A very successful brewery, as already noted, has been lately established in Manila. Of the \$10,000,000 worth of merchandise still being supplied by Europe manufactured cotton goods, including some of the gay print stuffs the people like, amount to about \$4,000,000; manufactures of iron and steel, \$1,500,000; wines, liquors, and beverages, \$500,000; manufactures of wood, silk, and fibre, \$500,000; chemicals, paper, glass, and earthenware, each about one-third of a million.

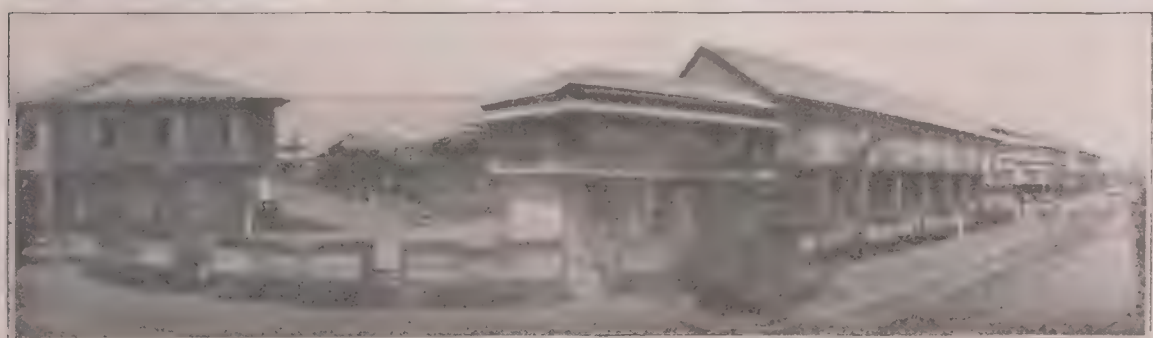
The amount of goods we now supply the Philippines is not an index of the great possibilities of the trade. Not only may the present demands be supplied to a greater degree by our manufacturers as they become more and more familiar with the tastes and needs of the people, but new lines of trade may be profitably cultivated. What may be done in this regard is shown by the success of a well-known firm of American importers in Manila in introducing a new line of high-priced vehicles. Shortly after the American occupation this firm sent specifications to

a vehicle-manufacturing concern in the United States for two-wheeled buggies to be modelled somewhat on the pattern of the crude two-wheeled carts then used for carriage purposes everywhere in the Philippines. Upon the arrival of the buggies, which were strictly in accordance with the specifications, but a great improvement in appearance over the existing carts, orders were largely placed. Now there are thousands of these modern *carretas* and *carromatos* in the Philippines, which have sold at retail from \$150 to \$850 gold each. The Filipinos are good spenders. Few articles are too luxurious for the wealthy class, provided they suit their tastes.

Many lines now imported from Europe would be purchased from our manufacturers were they to familiarize themselves, through the importer, with the requirements of the trade. It has been a function of the Philippines to educate the people of America as to the Orient, and this education is gradually being extended to commercial requirements. From the American manufacturer's point of view, a sharp distinction must be drawn between those portions of the Orient that lie in the temperate zone and those that lie in the tropics. In the temperate zone lie Japan and North China, where the climate is similar to our own, and where the demand for fabrics and food-stuffs can frequently be supplied with the same class of goods sold in the United States. The success of American cottons, for instance, in North China is chiefly due to the fact that it has a temperate climate, and therefore

the class of heavy cottons made for our own population is acceptable there. South China, however, relies on Europe for the light cottons required in its sub-tropical climate. These cottons cannot be readily had in the United States. But they can be had in Europe, where manufacturers are willing to make goods for exportation in form to suit the market in which they are sold. The Philippines, a tropical country, would take a large supply of our cottons were they manufactured for the trade there. In the Philippines are eight millions of people, most of whom, including men, wear cottons. They dress cleanly, and their demand is large. Years ago Dutch traders used to exchange cotton prints for wild products to great advantage. They found what the Filipinos in any particular district liked best in the way of light cottons; they sent a pattern back to Antwerp, and had a lot of the goods made up *exactly to match the pattern*. The Filipinos paid cheerfully, though they could have purchased cheaper cottons from the Chinese traders.

Differences are to be noted in the manner in which European and American goods are put up for the tropics. Our condensed milks will keep in North China, but usually cannot endure the warmer climate of the Philippines; our fire-extinguishers generally lose their efficiency in the tropics; our candies frequently melt and run stickily through the cardboard boxes: on the other hand, the Spanish and German confections are put up in wooden or heavy cardboard boxes lined with tin; are wrapped in tissue and



THE PHILIPPINES OF TO-DAY

A freight boat on the upper Cagayan — Coastwise steamers and trading vessels in the Pasig River — One of the canals in the commercial section of Manila — Modern method of delivering goods directly from steamers to freight cars — The little port of Romblón

tinfoil; are of a greater consistency; and, though much more expensive than our confectionery, find a ready market.

The difference in the class of goods demanded by the temperate and the tropical Orient is observed to great advantage by the European manufacturer. Out of the billion dollars' worth of goods imported into the tropical East every year, European manufacturers now supply sixty-six per cent, as against the one per cent now supplied by the United States. In the Philippines the obstacles that at first presented themselves to the introduction of our manufactures are rapidly disappearing, and in a majority of cases have long since been overcome. Importers are constantly informing our manufacturers in the United States as to their needs. Most of the leading dealers in the Philippines have established connections throughout the Orient, which assist in the development of our Far Eastern trade.

The impressive strategical feature of the Philippines, from a trade viewpoint, therefore, is their position with reference to the tropical Orient, whose nine hundred millions of people are rapidly adopting the methods and conveniences that we call civilization. Their position alone should be sufficient to commend the country to any American manufacturer who desires to extend the market for his goods. This market is vast indeed; yet, owing to our unfamiliarity with its requirements, we have as yet taken an unimportant part in its development.

What steps, the reader may ask, should the American manufacturer or exporter adopt to enter the Philippine trade? First (assuming that you cannot afford to experiment by sending a commercial representative to the islands),¹ get in touch with a Manila importer. There are at least forty American importing houses in Manila, besides others which handle American goods. The customs officials in Manila, the banks, the newspapers would gladly furnish names of individuals or firms handling your lines. If you are in earnest about securing this trade, post yourself so far as possible as to its requirements. Request the importer to offer suggestions as to the desired character, packing, and shipment of goods. If you do this the importer will assuredly be greatly surprised, though his constant prayers are that the American manufacturer will give heed to his suggestions. A short time ago a Manila importer told us that he had written at least a dozen times to a large canning company to put their goods up in one-pound and half-pound tins. "I cannot sell their two and five-pound tins," he said, "but I could sell a great lot of smaller tins. The class of people who buy the goods want just enough for one meal. They would rather pay three-fourths the price for a one-pound tin and buy another tin to-morrow than add twenty-five per cent and buy a two-pound tin." The manufacturer kept sending pamphlets and circulars, but the

¹ Several large firms carrying similar lines of goods have sent experienced representatives, with good results.

importer was obliged to place the order for this class of goods in Europe.

Having come into correspondence with your importer, the next step is the preparation of your catalogue. This should be written in Spanish, which is still to a great degree the language of the country,¹ — or at least of the older generation, — and also in English, and should have code words for each item as far as practicable. Cablegrams from the Philippines to the United States cost \$1.12 a word, with the address and signature at the same rate. As cables shorten the long months between the order and the delivery, many an order has been lost to the man with the uncoded catalogue, and given to his competitor who has realized its importance. The importer may have to spend from twenty-five to one hundred dollars extra in cabling an order from your uncoded catalogue, while similar goods can be purchased of your competitor, who has code words to designate his goods, without the extra cost in cabling. There is no clearer index to the ability of the manufacturer and the quality of his goods than his catalogue. Advertisers usually employ professionals to write their catalogues, but some of them write their own. In recognition of the long time required for the transit of letters and the expense of cablegrams, all catalogues should be written with painstaking care, to anticipate as far as possible the questions of customers. The firm name and business should appear clearly on

¹ After 1911 English will become the language of the courts.

the cover; for the importer may carry hundreds of lines and represent many firms, and therefore your catalogue should be one of his working tools, and be found easily in the file. All catalogues should be indexed and cross-indexed. The busy importer, with a customer waiting for a quotation, will spend no time in looking through your unindexed catalogue, but will throw it into the waste-basket and take up that of your competitor. It is important that the catalogue give full descriptions of the goods, and space is better expended thus than in printing testimonials and lauding the goods. The best quality of paper, and large plain type, are desirable.

All catalogues should give weight, both net and boxed. The cubic measurement of goods boxed for export should also be given. A ship's ton is 2240 pounds dead weight, or forty cubic feet, whichever way it will figure out the most freight; and by far the greater part of goods exported goes by the ton of forty cubic feet. Extra charge is made for packages weighing over two tons. Since freight by cubic measurement runs from double to ten times freight by weight, it is essential in figuring delivery costs to know the cubic dimensions of the particular goods. The catalogue should also not only give the dimensions of the boxes, but should figure them out in cubic feet. This will save your importer from doing it individually when he is figuring in a hurry for the waiting customer. All catalogues should, as a rule, give price lists and liberal discounts. The customer abroad

is always disappointed if the price quoted exceeds that in the catalogue, not clearly understanding that the expenses of forwarding, freight, duties, and many others, aside from the seller's profit, must be added to the manufacturer's price.

Having properly prepared your catalogue, so that your importer will be as fully posted as yourself and will be able to contribute the same degree of enlightenment to his customers, your next step will be to acquaint yourself with shipping routes and time of transit. The time between mailing a letter in the United States and receiving a reply from the Philippines is usually three months; but should the mail make ready steamer connections, the reply might be received in two months. The manufacturer will therefore not complain if his correspondence should not meet with an immediate response. For manufacturers in the eastern part of the United States it is, contrary to general impression, much cheaper to ship from New York, via Suez Canal. Freight is usually in transit from fifty-five to sixty-five days. While in some instances two weeks' time may be saved via the Pacific, such is by no means always the case. Certain classes of freight can be brought from the Philippines to New York for about the same as the rail rate between Omaha and Chicago. Oil steamers returning empty from Japan frequently carry cargoes at ballast price. Frequently freight can be shipped from the United States to Hong-Kong at a similar or less rate. An experienced forwarding agent should be employed,

who will advise as to the cost of freight; and by ascertaining the sailing dates of vessels he will advise you of the quickest time that may be made. The importer will in most cases instruct as to the route. If he says via the Pacific Coast you will understand that he means via San Francisco or Seattle; if he says via New York he means across the Atlantic and via the Suez Canal. Not long ago a Manila merchant ordered a Connecticut manufacturer to ship a large order via New York. He shipped to New York as directed, thence by vessel down the coast to Galveston, Texas; thence by rail to San Francisco, and by vessel to Manila; the freight costing about \$200 gold more than if sent via Suez. The manufacturer, one of the largest in his line in the United States, became very indignant when called upon to pay this \$200, stating that he had shipped via New York, as directed by the importer in his cable. By the same token, he might also have shipped via New York, the Northwest Passage, and Behring Sea.

American exporters should remember that the same postage applies between the United States and the Philippines as between different portions of the United States. Packages weighing under four pounds can therefore be despatched more cheaply to the Philippines by mail than by express. In packing goods for the Philippines you should remember that ships' tackle is the champion "baggage-smasher." Damaged packages mean loss of money, interest, time, and perhaps a local merchant's reputation, to say nothing of possible

claims against the freight agents or stevedores for the petty thefts which are then inevitable.

In the Philippines all imported merchandise is subject to customs examination, and nearly all manufactured articles are dutiable. As the customs officers have dealings only with the importer or local merchant, they must hold him responsible for the way his goods are packed. He in return must depend on his exporter or shipper for the proper packing and the proper invoices. The requirements of the Philippine customs service in regard to imported merchandise are briefly : first, the importer must declare in writing the number and marks of packages or the quantity of the goods in bulk, and the nature of the merchandise, under the terms of the tariff in force in the Philippines ; second, he must present the invoices of the goods, stating forthwith their value, with all costs incidental to placing same packed ready for shipment to the Philippines. Invoices must show the value of the several classes of merchandise separately, in order that the importer may properly declare the same. They must be made out in the currency of the exporting country and must show the marks and numbers of the packages, the gross and net weights of each package as defined by the tariff laws. This may seem complicated, but in reality it is simple. The net or dutiable weight of a case of perfumery, for instance, is the weight of the goods and all wrappings minus the weight of the outside case.

American goods are continually arriving in the

Philippines improperly packed. A Manila druggist recently ordered six glass percolators of an American supply house. They arrived in due course packed in a wooden case without a pound of excelsior or any other interior protection. The importer carried them away in a bucket, and stated that he had contemplated ordering two large consignments of drugs and other supplies, but that he would be compelled to obtain them in Germany, where they would be packed, invoiced, and billed in a business-like way.

If the American manufacturer has observed the few directions here mentioned he will assuredly be marked out among importers, shipping men, customs officials, and customers as a marvel, whose business-like methods insure the proper delivery of goods.

The American exporter should bear in mind that the mass of the people have a large purchasing power for low-priced goods, and that food-stuffs should be put up with regard to their preservation in the tropics. Each of the importer's customers will buy only a limited quantity of goods at any one time; small packages are therefore in demand. On the other hand, importers of goods from the Philippines may generally purchase only a limited quantity of many kinds of manufactured goods at a time, though large consignments can be gathered and shipped for you by an agent if you have provided him with the necessary cash credit. For instance, an importer in the United States had ordered a large consignment of Manila hats, an article resembling the Panama hat, and bringing as high prices in

this country. Not receiving the hats, he caused inquiry to be made from a dealer in the district where they are manufactured as to why they had not been shipped. The dealer replied that the hundreds of people who weave these hats in their homes were unable to wait through the long period between the time the goods could be shipped to America and remittances made, and that in order to secure these goods it would be necessary to have an agent in Manila make part payment as the hats were shipped.

The Filipinos will, however, frequently pay high prices for what are to them luxuries. In this class of goods are American-made shoes. A poor Filipino who has risen in wealth above his fellows is known as a "shoe hombre," that is, a man who wears shoes. Patent leathers are largely in demand. Again, while the writer was in the provinces of the Philippines at least forty farmers asked him where they could secure windmills. Some of them have since purchased windmills at a round figure.

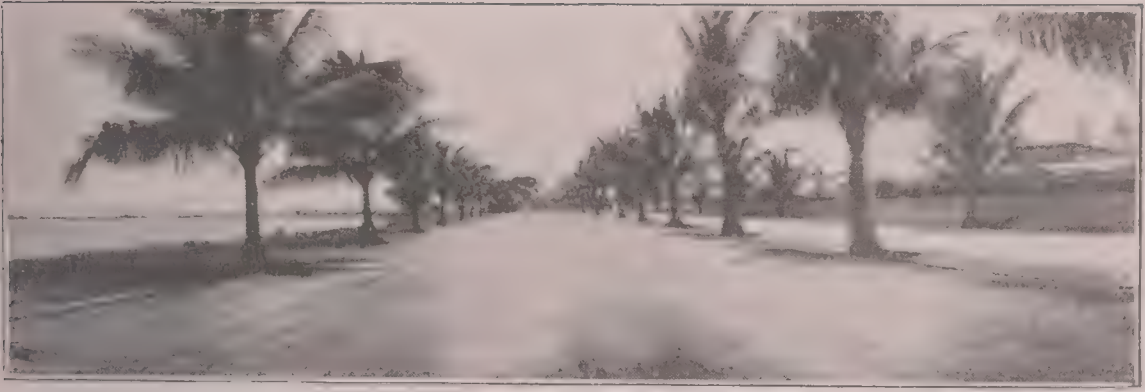
The possibilities of a mail-order business may have been suggested to some readers. It is appropriate to observe here that it would not now be profitable to circularize the islands generally. Selected lists in some lines might, however, bring good results; but in order to carry on such an undertaking successfully the American manufacturer should have in Manila a responsible agent who is thoroughly familiar with the situation throughout the archipelago.

Despite the nearer Oriental markets and the long

established demand for certain classes of Philippine products in European countries, there would seem to be excellent opportunities to introduce various products of the archipelago into the United States. Such importations, of course, should be handled for the purchaser by an agent in Manila. Among articles that meet with favor are the exquisite Manila hats, mats, and cloths; hardwoods, pearls, shells, etc.

From a sociological point of view, large trade between the United States and the Philippines is a consummation much to be desired. As Foreman, the historian, points out, through trade the two races will more readily and thoroughly arrive at mutual comprehension and sympathy. There are no obstacles to the continuous development of a great commerce. The American importer is glad to handle the wares of the American manufacturer, and also to assist in the exportation of Philippine products. The ten million dollars' worth of European imports yearly to the Philippines is not only a prize meriting consideration, but having once entered the Philippine trade, we have secured a wedge into the tropical Orient.

The entrance of capital into the Philippines has a direct relation to their purchasing power. The great need of the islands to-day is capital, and there its opportunities are seemingly unsurpassed. Production in the islands is limited only by the working capital; and American concerns intelligently managed will not only profit themselves, but will help the country in educating the people as a whole to better methods.



CHARACTERISTIC SCENES IN THE PHILIPPINES
 Madcon drive, Manila, showing the bay and the walled city —
 Pagsaugan gorge, near Manila — Cliffs along the
 seacoast islets — The beginning of
 a hemp plantation

With the certain and rapid development of the people there will come an increased demand for American shoes, American hats, shirts, condensed milk (if properly prepared), other food-stuffs, windmills, ploughs, harrows, rakes, spades, power-plants, agricultural implements of all sorts, watches, jewelry, finery, buggies, wagons, and other articles which are now or can be manufactured, that would help to raise the standard of living.

BIBLIOGRAPHY

Consular reports on Oriental trade bear in some degree on Oriental trade conditions mentioned above. Apply, Department of Commerce and Labor, Washington, D. C. For information regarding the shipping of goods, apply to any trans-continental railway company. Information regarding customs regulations may be obtained of the Bureau of Insular Affairs, Washington, D. C., or of any customs official of the United States, since Philippine tariffs correspond to those of the United States, though there is a reduction of twenty-five per cent of the Dingley tariff.

CHAPTER XXI

THE FILIPINO AS A WORKER

OUTLINE OF TOPICS: Increased freedom of the Filipino workman under the American occupation — His abilities disclosed by conditions of civilization — Building of Manila electric railway system — Filipinos as conductors and motormen — Dependence of progress on the welfare of the people — Their demand for fair treatment in return for faithful work — Educating the people in industrial methods — Peonage in early times — Cash wages — Necessity for supervision at first — Readiness of the Filipino people to lay hold of Occidental civilization — Bibliography.

AS the right to live implies the right to work, whether an individual or a nation be under discussion, it is pertinent to inquire here what are the average capabilities of the people of the Philippines to perform satisfactory labor under modern conditions of civilization.

Half a decade ago it would have been impossible to attempt an answer to this question. Save in the vicinity of the larger cities the faintest approach to Western civilization did not exist, and even then the channels through which the people were permitted to cultivate their abilities were so extremely limited that it would have been impracticable to form any conclusions as to their limitations. For centuries the majority of the population have been so circumscribed

with primitive conditions and crude working appliances, that they seemed unfitted for more than a mechanical performance of duties.

During the last few years, however, many of the people have been afforded the opportunity to discard the garments they have worn from time immemorial and to assume the newer habiliments of civilization. In most instances the clothes fit, and they fit well. Instead of being able to fill only such positions as *cocheros* (drivers), body servants, *scribientes* (clerks), musicians, wood-carvers, and other occupations requiring little initiative or judgment, it is disclosed that the Filipinos become, in time, capable of performing every task that has been seriously set before them. We have Filipino locomotive engineers and conductors, who perform their duties most creditably without the superintendence of white men; Filipino motormen and street-car conductors, Filipino brewers, typesetters, metal-casters, pilots, marine engineers, blacksmiths, lumber-mill employees, such as sawyers, loggers, and a host of others whose tasks require not only constant application but a degree of initiative and judgment.

The apparent inattention of the Filipino to the task in hand has often been commented upon by visitors to the archipelago. He has appeared, it has been asserted, to lack both the power of concentration and the faculty for continued effort. He has seemed vigorous neither in mind nor body, and his thoughts have seemed to turn inconsequentially from one

subject to another. These assertions are, it must be acknowledged, largely true of the native worker while he is yet untrained. From the character of his surroundings, the exuberance of natural products, and the habits resulting from his primitive way of living, his time has been taken up with "odd jobs," and the necessity of continued effort along a single line has never presented itself. In fact, he does not comprehend the imperative need of continued energy when first he is employed as a regular workman. But he soon learns. In this connection the experience of a large contracting firm which built the electric railway systems in Manila may be related. When the construction company began operations they employed about 500 men. On the first Monday the 500 men all appeared ready for work; on Tuesday only 150 turned up; on Wednesday there were about 300. So it fluctuated. The superintendent made inquiry. The new workers were like children: "Oh, señor, what does it matter to you, señor, whether we do this work to-day or to-morrow or Saturday? We ask wages only for the work we do." The superintendent replied that it was necessary that the work be done during the specified periods, and that he would discharge any man who failed to report for work for two consecutive days unless for some unusual cause. The men, after that, reported promptly for duty. Very soon afterward it was discovered that in the afternoon they became weak and listless. It was found that they ate no lunch at the noon hour, except

perhaps a few bananas, but merely slept in the shade. The superintendent then arranged to give each of the workers a peseta (ten cents American money) at noon time. He also took care that at noon each day there should be on hand a food-vender to sell the workers, at reasonable cost, a few simple, nutritious foods of the kind to which they were accustomed. Thereafter the men worked efficiently all day. After several weeks, however, it was found that many were deserting to go home to their families ; for, as has elsewhere been observed, the Filipino is devoted to his home. It was decided to remove this cause of trouble. The families were located in homes built for them close to the spot where the labor was performed. Now this colony plan is adopted by many of the large companies, which provide, beside the homes, churches, school-houses, a cockpit, a dance hall, a band for the workers, stores, and so on. The labor is now found to be dependable, and, though less efficient, it compares favorably, for the price paid, with labor in the United States. The company which built the Manila street railways, having undertaken similar ventures in the United States, accounts the average efficiency of the Filipino laborer as eighty per cent of that of the American.

A greater degree of skill, however, is involved in the running of the electric street-cars in Manila than that necessary in the workers who laid the track. No clearer evidence could be given of the abilities of the people than a recital of the present working of the

Manila street railway. This plant, comprising about fifty miles of street railroads on which one hundred cars are running, is operated entirely by Filipino motormen and conductors. The success of the road is largely due to the rank and file of the operatives. It must be remembered that to operate with safety a modern electric car in the crowded streets of an Oriental city, where the road traffic and the pedestrians are absolutely at variance, the people being unaccustomed to such swiftness of transit, calls for steadiness and resourcefulness in the driver. The Filipino motormen have demonstrated that they possess these very qualities, though cursory investigators have declared them to be lacking.

To appreciate this demand for steadiness, one must have had experience in trying to progress through the streets of a typical Eastern metropolis. Pedestrians use the roadway very often in common with vehicles, and may generally be persuaded to make way only when their lives are actually in danger. A narrow escape from death is uniformly treated as a good joke, not only by the observers, but by the principal as well. Under these circumstances, the almost complete freedom from serious accident in the operation of the line is undoubtedly noteworthy. The conductors, too, uniformly show ability to live up to the requirements of their work; they are, moreover, honest.

It may be here observed that before the installation of the Manila street railway system grave doubts were



EXECUTIVE OFFICES AND MUNICIPAL COUNCIL AT
SANTA CRUZ, MARINDUQUE

expressed, even by those who had had years of experience in dealing with native labor, as to whether or not the cars could be run at all with Filipino operators. And if, it was stated, it should prove possible to conduct the system with native employees, the patronage would not be sufficient to render the venture profitable. Yet the cars are always crowded; the service is excellent and abundant.

That the political and economical progress of the Philippines is dependent upon the welfare of the people is self-evident. Further, that welfare is largely dependent upon the intelligence and guidance of the foreigner. Wherever in these islands the foreign pioneer has located himself, he is teaching his native neighbor better industrial methods, and at the same time he is benefiting himself by taking advantage of the resources of one of the most fertile countries in the world.

Perhaps the most striking example that could be given of the success that may come to the Anglo-Saxon that makes good workmen of the native population and improves their condition as well as his own, is to be found in the marvellous experience of Mr. John Orr, of Dalupaon, a town founded by him in Southern Luzon. Mr. Orr went to the Philippines fourteen years ago and engaged in lumbering the inexhaustible mahoganies, ebonies, and construction woods. When he settled at Dalupaon, eight years ago, the people of that vicinity, who were a wild tribe of the great Bicol Filipinos, lived in the

trees and subsisted on roots, fish that were cast up by the sea, and the precarious fruits of the chase. Mr. Orr taught these people how to work, and he paid them for their work. They became efficient laborers, and to-day his foremen and skilled foresters require no supervision. At the present time there are in the vicinity about three hundred families who live in good houses of native construction, wear good clothes, go to church, and send their children to the schools provided by Mr. Orr. That the most of the Filipino people do best under a paternal administration is attested by the immunity from various disasters which has attended Mr. Orr's workers. When, about half a decade ago, the cholera broke out in Ambos Camarines Province and destroyed about eighteen per cent of the population, Mr. Orr quarantined his little community by placing an armed sentry at each trail leading from the forest. Not a person was taken with cholera. When the insurrection broke out, Mr. Orr's men remained at work. When grim famine followed the insurrection, and tens of thousands perished for food or succumbed to disease, and when our Government was expending millions of dollars in the importation of rice to relieve the famine-stricken districts, Mr. Orr had abundant food for his employees. And so through war, famine, and pestilence, this pioneer kept his own people busy and happy, and was at the same time carrying on a profitable venture. Some of his workers have never left the cuttings, and only three of them have ever left him to seek

employment elsewhere. None have ever expressed genuine dissatisfaction.

The increased physical and mental ability which comes to people leading an orderly life and having abundant nutritious food is emphasized by the following incident: On one occasion six of Mr. Orr's men, between the ages of seventeen and twenty-eight, rowed us in a heavy lifeboat along the coast of Southern Luzon for four days without a stop. The first day thirty-eight miles was accomplished; the next day, with a rough sea, seventeen miles; the next day twenty-three miles, and the last day twenty-six miles. The heaviest of these young men did not weigh as much as one hundred and thirty pounds. They ate three hearty meals a day of rice and fish, and at night when the lifeboat had been pulled up on the beach, and turned over, they slept like logs under its shelter. At the end of the trip they seemed as fresh as at the beginning. Mr. Orr, who trained them to row, says he would match them, for endurance, against any crew in the Orient. They have defeated Japanese, Spanish, and American crews from sailing vessels.

The labor problems affecting pioneers who have established themselves in the remoter parts of the archipelago have been satisfactorily solved by the readiness with which the wild people have been converted into industrious workers. The following is a case in point:

Mr. Frank C. Cook, president of the Davao Planters'

Association, owns a plantation on the Balutaca River, forty-five miles south of Davao, Mindanao Island. When first he went to the region, in the early nineties, Mr. Cook came upon a lovely valley in the midst of a jungle. The scattered tribes living about — pagan Bogobos and others — were wild, timid, and quarrelsome. Mr. Cook at first found it difficult to get into communication with them, but by living there alone he won their confidence. Under his direction a village street was laid out, trees were planted, and houses built. The wild Malay showed a willingness to work, and sought food, clothing, and merchandise. At the end of two years Mr. Cook had a village of about two thousand people upon his plantation; to-day he can put a hundred extra men to work in the fields at any time. The people are simple-minded and industrious; they have never molested any white man, nor committed any violent crimes among themselves.

The advent into agricultural life, of a large number of young men who have completed service in the employ of the civil government, or served their enlistment in the army, has proved an educational factor of no little importance to the people. In Mindanao thousands of the mountain people now live in good houses, eat good food, and are adopting civilized dress. They are laying aside their spears and *krises*, engaging in agriculture, and sending their children to school.

The successful employment of Filipino workers

involves an understanding of native character. The prime requisite of success lies in treating the people justly; or, to use President Roosevelt's phrase, "giving them a square deal." The native has an inherited dislike of injustice. He is intolerant of anything that suggests favoritism or wire-pulling. He resents harsh treatment, and he demands an equivalent for his work. In passing, it may be remarked that the defection of labor in Spanish times was often caused by the fact that the workers were not paid in cash, but in a depreciated script, or in merchandise of various sorts. Natives who receive regular cash wages seldom desert; they steadily improve in efficiency, and soon learn to take pride in their work.

The Filipino has often been charged with unfaithfulness to his employer; but he works faithfully when treated fairly. During Christmas week in 1905, one of the larger lumber mills of Manila received some urgent orders, to complete which it was necessary to work night and day. The superintendent guaranteed time and one-half for work on Christmas Day and Sundays, and double time for night work. The American foremen all refused to work, but the Filipino workmen were all on hand and worked under the direction of the manager and president of the company. And it must be borne in mind that Christmas and holidays are more observed among the Filipinos than among Americans. The former learn better to work through observance, or practical application to the task, than through theoretical teaching. It is what they see

another do that they wish to do. Upon this point General Leonard Wood wrote us:

“ There are certainly few, if any, problems which will not entirely disappear once development of the islands is well under way and the people are at work. The question in the Philippines is not so much one of political administration as of agricultural development. The people are peaceable, quiet, and easy-going, and with an opportunity to labor and a fair market for their products, most of the so-called problems which are, in my opinion, largely due to lack of occupation, will disappear. Nothing will do more to this end than free trade with the United States. I think that the greatest benefit that we could confer on the Filipino people throughout the length and breadth of the archipelago would be to scatter all through the islands a number of immigrant farmers of a desirable class. It is not necessary to bring a great number of immigrants of this class, but just enough to stimulate the varied industries of the islands. I believe that the effect of this class of immigrant farmers would be most beneficial upon the people. They are quite willing to learn, but have no examples before them of modern methods or modern appliances. The object lesson presented by an up-to-date, successful agricultural establishment would be an eye-opener to the people for miles in every direction. This kind of education is much needed. We desire good, intelligent settlers to come here and aid to develop the country. If the Moro, for instance, saw an American planter with American machinery, and saw the way that the wife and the children of the American planter lived, he would quickly want many of the same comforts possessed by the white man. He would see that the machinery helped the other fellow, and he would get it; he would see the comforts enjoyed by his white



SEÑOR RICARDO AGUADO
Secretary of the Filipino Chamber of Commerce

neighbors, and his family would demand that he get the wherewithal to furnish them with a fair measure of the same. They would not be contented with the conditions they have heretofore known."

It is not out of place to observe here that the present industrial development will bring about the condition desired by General Wood. It is already bringing it about.

Most observers appreciate the need of an industrial education for the people. The schools will stimulate development through providing a common language, but our school system has been criticised for not putting a premium on expert manual labor. The demand for expert native machinists is far from being satisfied, it is said, while clerical positions are overcrowded. The following from Dr. David P. Barrows would seem to indicate that the Government had long ago anticipated this criticism :

"The great demand upon educators of to-day is that their instruction shall be practical, and by this is usually meant that whatever a boy learns in school should apply immediately and directly upon his future vocation. The voice of those demanding that Filipino education shall first and foremost aim to raise the industrial efficiency and material welfare of the people, is often heard, and the counsel is far too important to go unheeded. As a matter of fact, this has been and is one of the constantly sought objects in framing a system of instruction for Filipino schools. The principal means of livelihood in these islands is agriculture, and the second is fishing. It is probable that the actual number of Filipinos at skilled trades does not need to be greatly increased, but

those who direct those trades need to be more skilled and more intelligent than they are at present. The chief objection to their work seems to be that the artisan can only make well with his hands objects which he repeatedly made before, or for which he has been furnished the necessary pattern. These are the precise limitations which the instruction in the trades inaugurated by the Bureau of Education aims to overcome. If the future artisan of the Philippines, trained in the public schools, is to be intelligent, is to possess initiative, is to be able to work at original plans and to construct from designs, he must have as a basis the rudiments of an education. With this estimate in mind, trade work is not attempted in the primary schools, but is put into the intermediate class which constitutes the fourth, fifth, and sixth years of instruction for a boy. Wood-working shops with machinery have been installed in Manila and Pasig; the same has been ordered for Ilicos Sur, Sorsogon, Iloilo, and by the Moro provinces for Zamboanga. Iron-working machines have been installed in Manila and ordered for Iloilo and Zamboanga; wood-working tools and instructions in carpentry have been furnished to twenty-four different provinces, and drawing implements for mechanical drawing to eleven provinces, with sets ordered for four additional provinces. Iron-working tools for instruction in blacksmithing have been furnished to seven provinces, besides a blacksmithing department in the trade school at Manila. Trade school buildings for the installation of these tools and machines have been completed, or are under construction, or contracted for, in eight provinces.

“This is not a bad showing when we remember that two years ago practically no tool work was being taught except in the trade school at Manila. But the best feature of the inauguration of this instruction is the

enthusiasm and interest which it commands from the Filipinos themselves."

Peonage in Spanish times was often carried on to extremes in some of the more remote localities. Frequently it involved absolute slavery. Even to-day instances of both slavery and peonage may be come upon. Not long since a case came up in a provincial court, of a native who had worked for forty years without recompense, as a household servant for one of his own people. A scanty living and his clothing — of the barest sort — were the fruits of his four decades of practical slavery, beginning, it was said, when his parents first bound him out for debt. In such cases it is often extremely difficult to obtain testimony. When, in this instance, the servant was protected from the threats that had been made by his master in case he should reveal his condition of servitude, he talked freely; and people of his neighborhood, being given to understand that no harm could come to them through their action as witnesses in the courts, flocked to the trial and gave their testimony. The influence of court cases such as this is profound and lasting; it is not only a deterrent to future crimes of this sort, but serves to bring home to the people the liberty of person guaranteed by American government.

It must not be inferred that the Spanish were responsible for the existence of peonage. The practice has existed in all countries in the period of their dark ages, and the Orient with its established lines of caste is particularly disposed to the custom. Among the

Christians it has practically been obliterated, and even among the Moros, where the dattos in remote regions exact great tribute from the people, service for debt is dying out. Felons convicted of wilfully compelling bodily servitude are now serving terms at the insular prison at Bilibid.

The employment of labor on a large scale in the Philippines presents some advantages not enjoyed in the United States. With just treatment, the workers and their families almost invariably become deeply attached to the plantation or colony on which they may be established. They can scarcely be induced to leave its boundaries, certainly not for extended periods. Strikes among such workers are unknown. Although requiring constant supervision at first, their adaptability soon brings them beyond this necessity. For certain kinds of field and indoor work their deftness with their hands at once renders them equal to the manual workers of any land. Thus in the manufacture of cigars and cigarettes, in the picking of weeds or plucking of bugs from plants, they are unsurpassed. In the Cagayan Valley of Luzon the wife and children of the native planter perform the lighter work in the tobacco fields. Wages for field labor are relatively slight: from ten to fifty cents American money a day, according to the distance from Manila, and from ten to forty or fifty pesos (a peso is fifty cents) would seem to be an average monthly wage. The following may be taken as an approximate estimate for various employments throughout the islands:—

Farm hands earn about twenty cents a day on the average. The same class, employed on public works as unskilled laborers, are paid from thirty to forty cents. Rockmen and other semi-skilled workmen receive forty to fifty cents. Of really skilled artisans, the carpenters are the commonest, and they receive from sixty cents to one dollar and fifty cents. Blacksmiths are paid from one to two dollars; boiler-makers make two dollars or more, and machinists from one dollar and fifty cents to two dollars and fifty cents. Steam engine drivers and plant operatives are paid from thirty to seventy-five dollars per month.

Native laborers soon make excellent plantation employees. Their natural liking for mechanical contrivances helps them to understand the care and operation of agricultural machinery. They readily handle steam ploughs and all manner of modern implements. There has not been a dearth of this labor on the Government farms or among the large planters.

The capacity of the workers rapidly increases. Those who would criticise the untrained native laborer should not lose sight of the fact that the work he performs under the tropical sun would wear out an Anglo-Saxon within the course of a few years. Physical work during the midday hours in the hot season is extremely trying. Though they have for centuries been accustomed to "lay off" during the noon hours, laborers employed in recent construction keep the stipulated hours. Often native farmers may be seen in their rice fields during the hottest hours of the day.

Colony workers, too, have many advantages over those who are their own masters. The erection of a colony settlement on sanitary lines, the establishment of neat and attractive homes, and the association with an improved manner of living, creates in them habits of thrift, and new desires. A number of the large companies have established stores at which, if the workers desire, they may purchase not only the necessities of life, but a considerable variety of luxuries. In one instance where sewing-machines were kept, almost every housewife purchased one. Purchase at these stores is never mandatory, and it would be a dubious experiment to attempt to make it so.

The most industrious laborers are undoubtedly found among the Ilocanos, a people who inhabit the shore slopes of the west of Northern Luzon. Centuries of living in the least fertile portion of the archipelago have produced a thrifty and industrious race. They are the Yankees of the Philippines, and by virtue of their industry the population has increased to such an extent that they have migrated throughout the islands. It is no unusual sight to see hundreds of them removing with their families to other districts; many colonies of them have been introduced into the fertile Cagayan Valley to the east, across the Caraballo Mountains, where the people, by living in a naturally rich land, are much less industrious. They work for a peseta (ten cents) to a half-peso a day (twenty-five cents), and soon by their industry accumulate a competence. In some regions,

as in the hemp districts, owing to the unexampled prosperity of the industry, the demand for labor has increased to such an extent that it is difficult to satisfy it. Great numbers of laborers were first imported from other regions of the islands, but it was found that only when their families were brought with them would they become satisfactory workers. As elsewhere indicated, positions such as clerks, drivers, and servants, are overcrowded.

By a careful investigation of the results attained by native labor in Manila foundries with those of Japanese labor in the Osaka Iron Works, the largest in Japan,—statistics and observations being furnished by managers in both cases,—we are impressed with the fact that the efficiency of the trained Filipino mechanic and that of the Japanese mechanic do not greatly vary. In these institutions neither is so strong or so efficient as the expert American workman. A Japanese workman in the Philippines does not generally endure the climate to the extent that native laborers do.

Perhaps no more complete change of industrial life has ever taken place among a people than is now beginning in the Philippines. The old system is being rapidly overturned; but so capable are the people to grasp the Western civilization that there would seem to be no formidable obstacles to their great material prosperity.

APPENDIX

TREATY OF PEACE

Being the so-called Treaty of Paris concluded between the United States and Spain, signed in Paris on the tenth of December, 1898, and ratified in Washington on the tenth of February, 1899. The original documents are drawn up in Spanish and in English.

TRANSLATION OF SPANISH TEXT.

ARTICLE 1. — Spain renounces all sovereign rights and dominion over Cuba. Considering that when Spain shall evacuate the said Island it will be occupied by the United States, the United States undertake, so long as they shall remain in occupation, to fulfil those duties which international law imposes for the protection of lives and property.

ARTICLE 2. — Spain cedes to the United States the Island of Porto Rico, all others under her sovereignty in the West Indies, and the Island of Guam in the Marianas or Ladrone Archipelago.

ARTICLE 3. — Spain cedes to the United States the Archipelago known by the name of the Philippine Islands, which comprises all those islands situated between the lines beginning and ending as follows, viz. : — A line drawn from W. to E. near the 22nd parallel of N. latitude, crossing the centre of the navigable Channel of Bashee, from the 118th to the 127th degree of longitude E. of Greenwich ; another from the 127th degree of longitude W. of Greenwich to the parallel of 4° 45' N. latitude ; another follows in the parallel of 4° 25' up to its intersection with the meridian of longitude 119° 35' E. of Greenwich. From this last point starts another parallel of latitude 7° and 40', and follows up to the intersection with the 116th degree of longitude E. of Greenwich ; another line is drawn up to the intersection of the 10th parallel of N. latitude, with the 118th degree of longitude E. of Greenwich ; the zone comprised in this cession is closed by the line which runs from the said 118th degree up to the first line of those named in this clause.

The United States will pay to Spain the sum of \$20,000,000 within three months after the ratified Treaty is exchanged.

ARTICLE 4. — For the period of ten years, counting from the exchange of ratifications of this Treaty, the United States will admit Spanish ships and merchandise into the Philippine ports, with the same condition as the ships and merchandise of the United States.

ARTICLE 5. — As soon as the present Treaty shall be signed the United States will begin to transport to Spain, at their expense, the Spanish soldiers which have fallen prisoners of war to the American forces on the taking of Manila; these soldiers shall have their arms returned to them.

As soon as the ratifications of this Treaty shall have been exchanged, Spain shall proceed to evacuate the Philippine Islands as well as that of Guam, on the same conditions agreed to by the Commissioners for the evacuation of Porto Rico and the other Antilles, and in conformity with the Protocol of the 12th of August, which remains in force until its stipulations shall have been complied with.

The respective Governments shall fix the period within which the evacuation of the Philippine Islands and that of Guam shall be effected.

The flags and standards, the ships of war not captured in battle, the small arms, cannons of all sizes, with their carriages and fittings, gunpowder, ammunition, provisions, material, and effects of all kinds in possession of the Spanish sea and land forces in the Philippines and Guam will remain Spanish property. The cannons of large calibre which are not field pieces, and are mounted on the fortifications in the interior or on the coasts, shall remain in their present positions during six months after the ratification of the Treaty, and shall be purchased during that period by the United States if the contracting Governments can arrive at a satisfactory and voluntary agreement thereon.

ARTICLE 6. — As soon as the present treaty shall be signed, Spain shall liberate all prisoners of war and all persons arrested and detained for political reasons connected with the Cuban and Philippine insurrections and the war with the United States. Reciprocally the United States shall liberate all prisoners of war taken by the American forces, and shall negotiate the

liberty of all the Spanish prisoners which may be held by the insurgents of Cuba and the Philippines. The United States Government shall transport, at its own expense, to Spain, and the Spanish Government shall transport, at its own expense, to the United States, Cuba, Porto Rico, and Philippines, as the case may be, all those prisoners and arrested persons whom they have respectively undertaken to liberate in virtue of this article.

ARTICLE 7. — Spain and the United States of America mutually renounce, by the present treaty, all national or individual claims for compensation of any kind which might be brought against the other, or which might be brought by their subjects or citizens against the other government, on account of anything which may have taken place from the beginning of the last Cuban insurrection up to the moment of the ratification of the present treaty. They also renounce all right to indemnity for expenses incurred during the war. The United States shall judge and decide the claims of American citizens against Spain.

ARTICLE 8. — In fulfilment of the first three articles Spain abandons in Cuba and cedes in Porto Rico, in all the other West Indian Islands, in the Island of Guam, and in the Philippine Archipelago, all the buildings, fortresses, barracks, establishments, public roads, and, in short, all those things which, by custom or right, constitute public property and appertain to the sovereignty of the Spanish crown. Although quite unnecessary to do so, it is hereby declared that the abandonment and cession stipulated shall in no way affect the property and rights accorded by custom or law to the peaceful holders of goods of any sort in the provinces, cities, public or private establishments, civil or ecclesiastical corporations, or any other collectivity which has any legal right to acquire goods or rights in the ceded or abandoned territories, and the same applies to the rights and properties of individuals of every nationality whatsoever.

The abandonment or cession referred to comprises the delivery of all documents relating exclusively to the said renounced or ceded sovereignties, and which documents may have been deposited in the archives in the Peninsula. When the documents existing in the archives of the Peninsula refer only in part to the said sovereignty, it will suffice for Spain to remit a copy of the matter affecting the said sovereignty.

Reciprocally, Spain has the same right with respect to documents existing in the archives of the said Islands.

In the said abandonment and cession are comprised the rights of the Spanish crown and its authority over the archives and official register, administrative as well as judicial, which relate to rights and properties of the inhabitants of the said Islands.

The archives in registers shall be carefully kept, and the interested parties, without any exception, shall obtain, in legal form, authorized copies of the contracts, wills, and whatever other documents form part of the notarial archives, whether these official documents be in Spain or whether they be in the said Islands.

ARTICLE 9. — Spanish subjects born in the Peninsula, and resident in the territories, the sovereignty of which Spain abandons or cedes, may remain in or go away from those territories and still hold, in either case, their property rights, as well as the right to sell or dispose of the real estate or its produce. They shall also have the right to follow their trades or professions subject to the laws affecting all other foreigners. If they wish to remain in these territories and preserve their Spanish nationality, they will have to inscribe their names in the official register declaring their intention to remain Spaniards, and this must be done within the first year following the ratification of this treaty ; those who fail to so declare themselves will be considered as naturalized in the territory in which they reside.

The United States Congress will decide, in due course, all that concerns the civil rights and political status of the natives who inhabit the ceded territories.

ARTICLE 10. — Religious tolerance is guaranteed to the inhabitants of the territories abandoned and ceded by Spain.

ARTICLE 11. — The Spaniards resident in the territories named in this treaty shall be subject to the civil and criminal courts of the country in which they live, and in conformity with the law therein established, they shall be liable to be cited before these Courts in the same manner and under the same procedure established for the citizens of the country they live in.

ARTICLE 12. — Judicial proceedings now pending shall be continued on the following conditions : —

(1) Sentences already given, against which there would be no right of appeal under Spanish law, shall be executed by the competent authorities of the territory.

(2) Civil suits shall continue to take their course before the same Courts, or before those which may be established in their stead.

(3) Criminal cases pending before the Supreme Court in Spain, against citizens resident in the ceded or abandoned territory, shall continue under the jurisdiction of the Spanish Supreme Court, but the execution of the sentence given shall be confided to the authority of the territory.

ARTICLE 13. — Literary, artistic, and industrial copyrights acquired by Spaniards in the territories mentioned herein, shall be respected up to the ratification of the treaty. Spanish literary, scientific, and artistic works, which are not a menace to public order, may enter free of all duties and taxes for the period of ten years counting from the exchange of ratifications of this Treaty.

ARTICLE 14. — Spain can establish Consular Agencies in the territories herein named.

ARTICLE 15. — The Governments of the two countries shall reciprocally concede to merchant ships identical treatment with regard to port dues, storage, tonnage, etc., as that accorded to their own merchant ships which are not engaged in coasting trade. This article can be rescinded on either side on six months' notice of same being given by the one party to the other.

ARTICLE 16. — It is hereby understood that the obligations accepted by the United States with regard to Cuba shall only be in force during the occupation of that island, although the United States undertakes to advise the Government which may hereafter be established there to take up the same obligations.

ARTICLE 17. — This Treaty shall be ratified by Her Majesty the Queen Regent of Spain and by the President of the United States with the consent and approbation of the Senate. The ratifications shall be exchanged in Washington within six months from this date, or before if possible.

In witness whereof the respective plenipotentiaries sign and seal this Treaty.

Done in duplicate in Paris on the 10th day of December, 1898.

IMPORTS INTO AND EXPORTS FROM THE PHILIPPINE ISLANDS, BY COUNTRIES, CALENDAR YEARS 1901-1906,

Exclusive of Gold and Silver and U. S. Government Supplies.

IMPORTS.

COUNTRIES.	1901.	1902.	1903.	1904.	1905.	1906.
United States	\$3,534,255	\$4,153,174	\$3,837,100	\$5,098,820	\$5,589,946	\$4,477,886
United Kingdom	5,692,579	5,639,274	4,619,133	4,341,024	5,105,907	5,554,804
Germany	2,205,695	2,262,039	1,761,996	1,454,822	1,435,808	1,403,926
France	1,907,074	1,204,727	1,292,154	853,176	899,043	793,879
Spain	1,934,251	2,917,543	2,045,965	2,002,853	1,971,631	1,642,644
Italy	118,606	202,209	131,803	114,343	192,226	220,591
Austria-Hungary	117,765	117,074	100,951	88,978	99,575	100,671
Belgium	224,391	262,157	273,890	230,620	266,218	288,365
Netherlands	151,512	155,154	129,675	90,851	117,077	214,131
Russia	287,280	193,866	250,893	350,484	143,083	31,141
Switzerland	763,253	669,473	448,087	451,693	544,847	587,651
China	3,884,966	4,938,185	4,628,431	3,093,082	2,860,911	2,675,027
Hong-Kong	1,165,738	1,531,358	510,042	308,417	226,495	314,154
Japan	1,061,131	726,637	811,737	835,012	832,557	895,628
British E. I.	3,384,065	1,668,326	2,715,524	2,107,698	1,909,718	1,412,059
Dutch E. I.	23,242	97,417	61,270	42,536	86,769	171,094
French E. I.	2,359,039	5,575,199	8,168,721	6,375,522	5,347,130	3,791,167
Australasia	575,972	498,245	831,201	1,204,017	1,386,778	1,567,111
Other Asia	696,117	482,503	1,163,315	505,299	1,001,512	227,097
Other Countries	75,535	47,603	23,496	28,484	33,139	34,742
Total	\$30,162,471	\$33,342,166	\$33,811,384	\$29,577,731	\$30,050,550	\$26,403,768

EXPORTS.

COUNTRIES.	1901.	1902.	1903.	1904.	1905.	1906.
United States	\$4,546,292	\$11,475,948	\$13,071,426	\$11,654,968	\$14,840,407	\$11,869,289
United Kingdom	11,126,226	8,017,526	9,464,630	9,035,479	8,207,351	7,598,594
Germany	81,432	99,791	309,033	134,769	338,755	774,737
France	1,323,513	2,315,788	3,094,211	1,588,851	2,223,228	2,783,365
Spain	1,263,150	749,829	860,575	1,164,448	1,662,058	1,765,141
Italy	15,057	16,969	30,729	37,870	67,800	104,252
Austria-Hungary	80,150	148,603	265,641	68,945	394,419	312,378
Belgium	11,778	101,567	101,807	58,528	33,680	330,534
Netherlands	1,543	45,320	64,870	203,958	53,407	217,305
Russia	4,034	23,513	13,093	3,070	160	....
Switzerland	210	918	466	274	1,457	3,368
China	118,003	675,974	438,668	862,531	923,506	2,092,422
Hong-Kong	2,924,974	3,000,266	1,854,608	2,209,562	2,804,053	3,039,242
Japan	1,584,218	708,345	1,628,889	821,978	651,162	380,020
British E. I.	728,163	816,244	662,689	644,267	645,736	696,437
Dutch E. I.	18,599	31,764	24,917	21,782	32,746	27,282
French E. I.	1,622	3,822	10,366	10,586	9,229	54,567
Australasia	621,200	285,682	395,614	465,396	493,364	466,899
Other Asia	1,354	6,324	10,604	7,501	7,824	27,758
Other Countries	51,835	147,711	93,901	154,737	64,414	99,302
Total	\$24,503,353	\$28,671,904	\$32,396,746	\$29,149,500	\$33,454,774	\$32,642,892

PHILIPPINE

PRODUCTS FOR A SERIES OF YEARS,

(There is no other way of arriving at the productions necessarily ignores the products raised and consumed in manufactures made for home consumption, which may be such manufactures form an inconsiderable proportion manufactures, local or foreign, bear but small relation to

VALUE OF THE LEADING EXPORTS FROM THE PHILIPPINE

YEAR.	HEMP.		SUGAR.		TOBACCO. UNMANUFACTURED.	
	DOLLARS.	Total % Exports.	DOLLARS.	Total % Exports.	DOLLARS.	Total % Exports
1885.....	5,509,757	27	8,669,522	42	1,288,955	6
1886.....	4,340,058	22	7,019,978	35	759,931	4
1887.....	8,161,550	42	6,156,709	32	640,699	3
1888.....	8,099,422	42	6,271,030	32	1,340,314	7
1889.....	10,402,614	41	9,101,024	35	1,404,754	5
Aver. annual	7,302,680	35	7,443,653	35	1,086,931	5
1890.....	6,925,564	32	7,265,030	34	1,320,752	6
1891.....	10,323,913	49	5,696,746	27	1,258,743	6
1892.....	6,886,526	36	7,768,595	41	1,554,264	8
1893.....	7,697,164	35	10,368,883	47	1,463,853	7
1894.....	7,243,842	44	5,476,617	33	702,922	4
Aver. annual	7,815,402	39	7,315,174	36	1,260,107	6
1900.....	13,290,400	58	2,397,144	10	1,033,900	4
1901.....	15,976,640	65	2,549,147	10	748,485	3
1902.....	19,290,610	67	3,342,473	12	955,166	3
1903.....	22,000,588	68	3,324,554	10	954,259	3
1904.....	20,944,177	72	3,092,734	11	989,519	3
Aver. annual	18,300,483	66	2,941,210	11	936,266	3
1905.....	21,757,344	65	5,073,233	15	1,367,412	4
1906.....	19,612,632	60	4,554,092	14	1,767,365	5

(a) Value of cocoanuts included, 1885-1894.

NOTE. — Figures prior to 1900 are taken from "Estadística general del Total exports include gold and silver.

PRODUCTIONS.

AND COUNTRIES TO WHICH EXPORTED.

of the Philippines than by the exports, a method which the islands. There are, of course, a limited number of ascertained through the internal revenue statistics. But of the total of home manufactures; and, moreover, all the local consumption.)

ISLANDS, CALENDAR YEARS 1885-1894, 1900-1906.

TOBACCO. MANUFACTURED.		COPRA. (a)		COFFEE.		TOTAL, INCLUDING ALL OTHER ARTICLES.
DOLLARS.	Total % Exports.	DOLLARS.	Total % Exports.	DOLLARS.	Total % Exports.	DOLLARS.
1,008,403	5	.....	.....	820,610	4	20,551,434
1,250,162	6	5,781	.....	1,059,021	5	20,113,847
918,371	5	36,809	.....	1,612,009	8	19,447,997
1,108,867	5	131,347	1	1,500,418	8	19,404,434
850,740	3	209,820	1	1,818,544	7	25,671,322
1,027,309	5	76,752	.....	1,362,120	6	21,037,807
1,148,281	5	85,764	.....	1,588,416	7	21,547,541
891,563	4	.....	.....	956,049	5	20,878,359
981,476	5	743,918	4	434,550	2	19,163,050
969,451	4	414,652	2	103,439	.....	22,183,223
873,253	5	1,172,191	7	177,589	1	16,541,842
972,805	5	483,305	3	652,009	3	20,062,983
1,227,332	5	3,182,481	14	3,142	.....	22,990,373
1,883,456	8	1,611,838	7	5,437	.....	24,503,353
1,007,458	4	2,701,725	9	2,432	.....	28,671,904
992,616	3	3,819,793	12	1,095	.....	32,396,746
1,029,231	4	1,981,122	7	3,153	.....	29,149,500
1,228,019	4	2,659,392	10	3,052	.....	27,542,375
914,291	3	3,244,703	9	2,482	.....	33,454,774
1,075,639	3	4,373,702	13	1,822	.....	32,642,892

comercio exterior de las Islas Filipinas," issued by the Spanish Government.

HEMP EXPORTS TO DIFFERENT COUNTRIES, CALENDAR YEARS 1885-1894, 1894-1906.¹

YEAR.	UNITED STATES.	UNITED KINGDOM.	SPAIN.	CHINA.	HONG-KONG. ²	BRITISH EAST INDIES.	OTHER COUNTRIES.	TOTAL.
	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS	DOLLARS.	DOLLARS.	DOLLARS
1885	2,525,781	1,595,181	318	.....	.....	1,374,625	13,852	5,509,757
1886	2,104,220	1,052,624	18,832	.....	.....	995,008	169,374	4,340,058
1887	4,176,355	1,737,182	13,019	.....	.....	1,538,391	96,603	8,161,550
1888	3,176,878	2,847,379	21,764	1,257,915	.....	742,633	52,853	8,099,422
1889	3,379,371	4,212,908	.....	2,421,934	.....	225,267	163,134	10,402,618
Aver. annual	3,192,521	2,289,055	10,786	735,970	.....	99,163	99,163	7,302,680
1890	1,029,527	3,576,852	73,789	1,662,235	.....	324,041	259,120	6,925,534
1891	1,908,511	6,293,787	24,474	1,504,773	.....	251,472	340,896	10,323,913
1892	1,541,581	3,080,618	14,904	1,985,247	.....	153,255	110,921	6,886,526
1893	2,553,143	3,750,066	95,503	1,100,501	.....	76,901	121,045	7,697,164
1894	3,304,452	2,610,331	22,849	408,093	.....	426,198	405,919	7,243,842
Aver. annual	2,067,443	3,863,531	46,305	1,344,170	.....	246,373	247,580	7,815,402
1900	2,796,668	7,102,711	116,254	106,991	1,882,593	229,613	1,055,570	13,290,400
1901	4,157,313	10,359,983	17,040	8,228	832,577	126,864	474,635	15,976,640
1902	11,039,380	7,053,786	6,770	.....	455,107	108,075	577,492	19,290,610
1903	11,762,440	8,930,942	12,777	19,702	614,407	128,519	531,801	22,000,588
1904	10,686,896	8,689,400	14,002	28,300	434,905	142,731	947,943	20,944,177
Aver. annual	8,098,539	8,427,364	33,369	32,644	843,918	147,161	717,488	18,300,483
1905	12,648,143	7,872,267	31,520	.....	200,052	142,634	862,728	21,757,344
1906	11,155,550	7,199,080	4,960	59,160	262,269	206,576	725,037	19,612,632

¹ Figures prior to 1900 are taken from "Estadística general del comercio exterior de las Islas Filipinas," issued by the Spanish Government, and all quantity reductions necessary in preparing the different tables herewith have been on the basis of kilogram, 2,204½ pounds, picul, 137.9 pounds, quintal, 101.44 pounds.

² Hong-Kong included under British East Indies from 1885-1887, and from 1888-1894 under China.

APPENDIX

373

SUGAR EXPORTS BY COUNTRIES, CALENDAR YEARS 1885-1894, 1900-1906.¹

YEAR.	UNITED STATES.	UNITED KINGDOM.	SPAIN.	CHINA.	HONG-KONG. ²	JAPAN.	BRITISH EAST INDIES.	OTHER COUNTRIES.	TOTAL.
	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.
1885	5,831,776	1,131,914	314,654	83	.....	32,891	1,358,204	.....	8,669,522
1886	4,515,688	709,054	301,675	21,896	.....	.....	1,471,570	..... 95	7,019,978
1887	4,174,531	784,962	271,557	50	.....	12,474	513,130	5	6,156,709
1888	3,725,611	1,119,983	238,353	1,090,092	.....	.....	96,973	15	6,271,030
1889	5,173,891	1,321,200	396,688	1,304,546	.....	.....	99,581	805,118	9,101,024
Average annual	4,684,299	1,013,423	304,586	483,333	.....	9,073	787,832	161,047	7,443,653
1890	1,887,766	1,777,290	254,661	2,773,908	.....	.....	11,342	560,063	7,265,030
1891	2,471,926	1,828,022	129,580	702,408	.....	.....	.....	548,557	5,696,746
1892	1,356,171	2,981,297	199,556	2,582,323	.....	16,253	521,669	43,155	7,768,535
1893	431,897	5,918,577	166,991	2,839,445	.....	165,013	.....	846,960	10,368,883
1894	365,944	1,338,853	192,918	2,004,484	.....	568,838	2,395	1,003,185	5,476,617
Average annual	1,302,741	2,768,808	188,741	2,180,514	.....	166,906	107,081	600,384	7,315,714
1900	93,472	237,125	.....	76,013	1,311,308	551,376	.....	127,850	2,397,144
1901	293,354	.....	51	.....	1,000,775	1,254,967	.....	.....	2,549,147
1902	200,000	153,982	.....	564,523	1,835,659	1,505,039	.....	83,210	3,342,473
1903	1,135,326	.....	.....	284,299	622,111	1,282,301	.....	17	3,324,554
1904	870,624	.....	.....	636,144	1,080,994	504,972	.....	.....	3,092,734
Average annual	518,655	78,221	10	312,196	1,170,170	819,743	.....	42,215	2,941,210
1905	2,102,023	22,168	.....	781,776	1,960,025	207,241	.....	.....	5,073,233
1906	422,111	.....	.....	1,860,715	2,213,215	58,051	.....	.....	4,554,092

¹ Figures prior to 1900 are taken from "Estadística general del comercio exterior de las Islas Filipinas," issued by the Spanish Government.

² Hong-Kong included under British East Indies from 1885 to 1887, and from 1888 to 1894 under China.

THE SOURCES OF SUPPLY OF THE SUGAR
CONSUMPTION OF THE UNITED STATES
FOR THE YEAR 1906 ARE AS FOLLOWS:—

	Pounds.
Cuba	2,683,893,033
United States	1,304,607,360
Hawaii	852,468,867
Porto Rico	428,916,079
Java	425,372,363
Germany	303,430,122
South America	172,627,104
West Indies (except Cuba)	163,496,319
Belgium	65,861,744
Philippine Islands	26,283,929
Austria-Hungary	9,934,000
Mexico	3,186,469
Other countries	9,575,715
Total	6,449,653,104
Less sugar exported	25,731,407
Amount available for consumption	6,423,921,697

Of the above imports that from Porto Rico and the Hawaiian Islands entered free of duty, that from the Philippine Islands at twenty-five per cent below the regular rates of duty, and that from Cuba, under the reciprocity treaty, at twenty per cent below the regular rates of duty.

SUGAR-PRODUCING ESTABLISHMENTS IN THE PHILIPPINE ISLANDS
USING STEAM, WATER, AND HAND OR ANIMAL POWER.

Kinds of power used	Number of estab- lish- ments	Capital (pesos) ¹	Average number of wage-earners and total average monthly wages						Value of products (pesos)
			Men		Women		Total		
			Number	Wages (pesos)	Number	Wages (pesos)	Number	Wages (pesos)	
Steam	528	12,229,547	29,313	255,015	2,009	10,447	31,322	265,462	4,850,043
Water	77	1,532,207	3,631	34,596	370	2,124	4,001	36,720	609,378
Hand or animal.	470	3,171,741	8,994	81,209	930	5,426	9,924	86,635	1,143,585
Total	1,075	16,933,495	41,938	370,820	3,309	17,997	45,247	388,817	6,603,006

¹ The value of a peso, or Philippine dollar, is fifty cents American currency.

VALUE OF LEAF (UNMANUFACTURED) TOBACCO EXPORTED FROM THE
PHILIPPINE ISLANDS, BY COUNTRIES, CALENDAR YEARS 1885-1894,
1900-1906.¹

YEAR.	UNITED STATES.	UNITED KINGDOM.	SPAIN.	CHINA.	HONG-KONG. ²	BRITISH EAST INDIES.	FRENCH EAST INDIES.	OTHER COUNTRIES.	TOTAL.
	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.
1885	2	34,259	1,162,292	.....	.....	22,276	126	.....	1,288,955
1886	53	19,706	706,253	.....	.....	26,349	3,029	4,536	759,931
1887	108	374	415,876	.....	.....	131,850	50,239	42,252	640,699
1888	31	125,974	1,046,753	66,315	.....	61,068	18,168	22,005	1,340,314
1889	207	79,975	1,032,163	151,443	.....	11,251	44	79,666	1,404,754
Aver. annual	80	52,053	882,669	43,552	.....	64,551	14,321	29,692	1,086,931
1890	247	41,500	1,128,165	74,979	.....	39,555	2,002	34,304	1,320,752
1891 .....	...	35,202	1,035,153	39,314	.....	14,205	20,015	84,854	1,320,752
1892	150	27,236	1,106,618	59,316	.....	4,574	22,928	333,442	1,554,264
1893	98	90,832	887,625	115,895	.....	19,657	282	349,454	1,463,853
1894 .....	...	...	534,638	4,959	.....	23,381	...	109,944	702,922
Aver. annual	99	38,954	950,440	58,893	...	20,276	9,04	182,400	1,260,107
1900	7	31,156	613,199	...	2,462	43,939	.....	343,137	1,033,900
1901 .....	...	5,995	642,606	1,128	2,070	10,419	.....	86,267	748,485
1902	41,538	9,485	578,525	1,884	1,098	32,053	...	290,573	955,166
1903	790	9,356	545,729	276	760	21,682	483	375,183	954,259
1904 .....	...	6,439	777,365	1,432	5,667	28,843	425	169,348	989,519
Aver. annual	8,467	12,486	631,485	944	2,411	27,388	182	252,003	936,266
1905 .....	...	621	866,756	225	9,494	2,980	340	486,996	1,367,412
1906	6,143	22,654	849,831	1,825	16,664	3,010	100	867,138	1,767,365

¹ Figures prior to 1900 are taken from "Estadística general del comercio exterior de las Islas Filipinas," issued by the Spanish Government.

² Hong-Kong included under British East Indies from 1885 to 1887, and from 1888 to 1894 under China.

VALUE OF CIGARS, CIGARETTES, AND ALL OTHER MANUFACTURED TOBACCO EXPORTED FROM THE PHILIPPINE ISLANDS, BY COUNTRIES, CALENDAR YEARS 1885-1894, 1900-1906.¹

YEAR.	UNITED STATES.	UNITED KINGDOM.	GERMANY.	SPAIN.	CHINA.	HONG-KONG. ²	BRITISH EAST INDIES.	AUSTRAL-ASIA.	OTHER COUNTRIES.	TOTAL.
	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.
1885	2,092	52,908	343	24,860	1,808	.....	865,372	.....	61,020	1,008,403
1886	1,004	110,451	439	50,775	7,632	.....	890,526	.....	189,335	1,250,162
1887	17,343	52,408	3,927	34,545	4,467	.....	696,683	.....	108,998	918,371
1888	10,115	119,963	21,240	430,791	295,252	.....	206,066	221	25,219	1,108,867
1889	17,559	163,862	61,215	1,288	311,508	.....	157,291	48,194	89,823	850,740
Aver. annual	9,623	99,918	17,433	108,452	124,133	.....	563,188	9,683	94,879	1,027,309
1890	5,595	232,872	33,657	31,806	426,528	.....	245,669	18,097	154,057	1,148,281
1891	2,811	75,218	12,432	18,826	416,235	.....	258,624	7,218	100,199	891,563
1892	405	64,483	.....	39,285	543,933	.....	302,484	.....	30,886	981,476
1893	2,211	76,623	10,477	56,130	439,676	.....	173,629	40,526	170,179	969,451
1894	1,018	52,754	7,108	85,910	349,383	.....	216,884	32,437	127,759	873,253
Aver. annual	2,408	100,390	12,735	46,391	435,151	.....	239,458	19,656	116,616	972,805
1900	5,662	206,569	55,324	33,450	36,177	391,112	136,733	212,039	150,216	1,227,332
1901	984	601,164	33,138	37,994	98,207	396,955	170,122	399,678	145,214	1,883,456
1902	11,006	199,448	29,580	5,006	58,547	325,688	156,391	98,176	123,616	1,007,458
1903	1,903	100,044	21,639	2,404	82,108	374,997	174,449	95,635	139,437	992,616
1904	1,073	94,355	9,743	5,811	115,146	417,875	173,496	92,037	119,695	1,029,231
Aver. annual	4,126	240,318	29,884	16,933	78,037	381,325	162,238	179,523	135,635	1,228,019
1905	14,219	81,572	14,989	32,344	108,251	327,563	130,502	95,298	109,553	914,291
1906	31,086	103,426	17,025	21,481	125,780	338,075	129,224	126,405	183,137	1,075,639

¹ Figures prior to 1900 are taken from "Estadística general del comercio exterior de las Islas Filipinas," issued by the Spanish Government.

² Hong-Kong included under British East Indies from 1885 to 1887, and from 1888 to 1894 under China.

VALUE OF COPRA EXPORTED FROM THE PHILIPPINE ISLANDS, BY
COUNTRIES, CALENDAR YEARS 1885-1894,¹ 1900-1906.²

YEAR.	UNITED STATES.	UNITED KINGDOM.	GERMANY.	FRANCE.	SPAIN.	CHINA.	HONG-KONG. ³	BRITISH EAST INDIES.	OTHER COUNTRIES.	TOTAL.
	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.
1885
1886	5,574	.....	5,781
1887	36,247	.....	36,809
1888	54,138	.....	131,347
1889	157,489	.....	209,820
Aver. annual	50,690	.....	76,752
1890	70,716	.....	85,764
1891
1892	461,472	.....	743,918
1893	75,393	.....	414,652
1894	62,812	.....	1,172,191
Aver. annual	134,079	.....	483,305
1900	91,023	.....	3,182,481
1901	54,344	.....	1,611,838
1902	193,975	.....	2,701,725
1903	78,389	.....	3,819,793
1904	52,940	.....	1,981,122
Aver. annual	94,134	.....	2,659,392
1905	117,777	.....	3,244,703
1906	84,488	.....	4,373,702

¹ 1885-1894 values include cocoanuts, the quantities as shown in various units of measure being omitted.

² Figures prior to 1900 are taken from "Estadística general del comercio exterior de las Islas Filipinas," issued by the Spanish Government, and all quantity reductions necessary in preparing the different tables herewith have been on the basis of kilogram, 2.2046 pounds, picul, 137.9 pounds, quintal, 101.44 pounds.

³ Hong-Kong included under British East Indies from 1885 to 1887, and from 1888 to 1894 under China.

VALUE OF COFFEE EXPORTED FROM THE PHILIPPINE ISLANDS, BY COUNTRIES, CALENDAR YEARS 1885-1894, 1900-1906.¹

APPENDIX

379

YEAR.	UNITED STATES.	UNITED KINGDOM.	SPAIN.	CHINA.	HONG-KONG. ²	BRITISH EAST INDIES.	FRENCH EAST INDIES.	OTHER COUNTRIES.	TOTAL.
	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.	DOLLARS.
1885	5,158	19,269	392,263	96	.....	342,480	50	61,294	820,610
1886	5,868	22,382	465,328	.....	.....	455,337	109,984	122	1,059,021
1887	5,739	227,138	920,478	80	.....	443,059	4,889	10,626	1,612,009
1888	12	254,708	563,685	434,265	.....	246,923	825	.....	1,500,418
1889 .....	.....	311,939	716,253	668,952	.....	102,923	18,404	73	1,818,544
Aver. annual	3,355	167,087	611,601	220,679	.....	318,144	26,831	14,423	1,362,120
1890 .....	.....	52,647	744,720	741,967	.....	38,766	10,316	.....	1,588,416
1891 .....	.....	23,100	801,631	114,973	.....	12,795	2,671	879	956,049
1892 .....	.....	24,531	322,211	82,187	.....	2,208	2,600	813	434,550
1893 .....	.....	1,243	90,636	8,411	.....	531	25	2,593	103,439
1894 .....	.....	.....	143,666	28,336	.....	4,384	.....	1,203	177,589
Aver. annual	.....	20,304	420,573	195,175	.....	11,737	3,122	1,098	652,009
1900	25	377	487	225	1,777	148	.....	103	3,142
1901	225	160	236	902	1,832	1,820	.....	262	5,437
1902 .....	.....	.....	.....	1,009	1,272	105	.....	46	2,432
1903 .....	.....	.....	170	566	180	8	.....	171	1,095
1904	707	30	155	1,555	.....	12	.....	694	3,153
Aver. annual	191	113	209	851	1,012	419	.....	257	3,052
1905 .....	.....	.....	63	2,240	25	.....	.....	154	2,482
1906 .....	.....	.....	44	1,490	.....	.....	.....	288	1,822

¹ Figures prior to 1900 are taken from "Estadística general del comercio exterior de las Islas Filipinas," issued by the Spanish Government, and all quantity reductions necessary in preparing the different tables herewith have been on the basis of kilogram, 2.2046 pounds, picul, 137.9 pounds, quintal, 101.44 pounds.

² Hong-Kong included under British East Indies from 1885 to 1887, and from 1888 to 1894 under China.

MEMBERS OF THE DAVAO (MINDANAO ISLAND) PLANTERS' ASSOCIATION

Lais Trading and Development Co.	Lais	H. S. Peabody.
Culamen	Malita	R. K. Cole.
Davao Trading and Development Co.	Kibulan	{ J. N. Carrigan. J. N. Roscom.
Pioneer Malalag	Malalag	J. T. Byrne.
Paul, Nieman & Co.	Malalag	{ Benj. Paul. C. L. Nieman.
Reid, Cochran & Co.	Malalag	Mr. Reid.
Mindanao Estates Co.	Padada	{ J. H. Shipley. J. E. Shubert.
Jolo Planting Company	Maxville	A. C. McClellen.
Balutakay Hemp Plantation Co.	Balutakay	J. P. Skinner.
American Agricultural and Com- mercial Company	Cooksville	O. B. Watkins.
Digas Estate	Digas	M. Sawyer.
Keller & Gohn Company	Santa Cruz	{ F. L. Keller. W. H. Gohn.
Wilson Plantation Company	Lacaron	C. D. Wilson.
O. V. Wood	Santa Cruz	O. V. Wood.
Vandermerion & Co.	Santa Cruz	V. Vandermerion.
Luis Sorroche	Astorga	Luis Sorroche.
Tagulaya	Tagulaya	Juan B. Urquiza.
Fernando Navarro	Daron	Fernando Navarro.
Quinucul) Trinidad {	Daron	Manuel Sanches.
Dos Hermanos) Hacienda Paz {	Daron	Gregorio Palacios.
Kentucky Ranch	Daliao	J. L. Burchfield.
Hacienda Fiel	Dumuy	José Bastida y Ramón.
Belen	Davao	Juan Auad.
Tagun Plantation Company	Tagun	George Sickles.
American Plantation Company	Tagun	Mr. Harper.
I. H. Rogers	Mattiao	I. H. Rogers.
Piso Coconut Plantation	Piso	Peter Harding.

GROWTH OF POPULATION

YEAR	POPULATION.	AUTHORITY.	PER CENT OF ANNUAL INCREASE.
1591	667,612	(Encomiendas or slave-holdings)	
1735	837,182	(Church census)	
1799	1,502,574	Buzeta	
1800	1,561,251	Zuñiga	3.9
1808	1,741,234	Cédulas (<i>e.g.</i> poll tax)	1.4
1812	1,933,331	Cédulas " "	2.6
1815	2,052,994	Cédulas " "	2.0
1817	2,062,805	Cédulas " "	0.2
1819	2,106,230	Cédulas " "	2.1
1829	2,593,287	Church	2.1
1840	3,096,031	Local officials	1.6
1845	3,434,007	Buzeta	2.1
1848	3,745,603	Arenas	2.9
1850	3,857,424	Buzeta	1.5
1858	4,290,381	Bowring	1.8
1870	4,712,006	Guia Oficial	0.8
1876	5,501,356	Church	2.6
1877	5,557,685	Census	1.6
1879	5,487,218	Guia Oficial	0.9
1885	5,839,383	Church	1.0
1887	5,984,727	Census	1.2
1891	6,252,957	Guia Oficial	1.1
1893	6,333,584	Guia Oficial	1.8
1894	6,490,584	Church	2.5
1899	6,703,311	Father Algué	0.7
1903	6,987,686	Census	1.2

DENSITY OF POPULATION

The density of population in the Philippines as a whole is 67 persons to the square mile. It is exceeded therefore by Belgium, population 589 per square mile; Java, 553; Netherlands, 426; United Kingdom, 346; Straits Settlements, 344; Japan, 310; Italy, 294; Germany, 291; Porto Rico, 264; Switzerland, 210; France, 191; and by many others, including British India, Portugal, Denmark, Jamaica, Korea, Servia, Ceylon, Roumania, Spain, and others.

The density of population of the total continental United States is 26 persons to the square mile. This very low average population per square mile is of course accounted for by the inclusion of many vast arid wastes such as do not exist in the Philippines, as well as some yet existing thinly settled fertile regions.

The State of Indiana in density of population most nearly approaches the Philippines, having 70 persons per square mile as against 67 in the Philippines. The State of Rhode Island has a population of 407 to the square mile, or more than six times as great as the average in the Philippines. Massachusetts has 349 to the square mile, which in density compares with the Philippine province of Cebú, 337, and Pangasinán, 334 to the square mile. The most densely populated province in the islands is Ilicos Sur with 398 persons to the square mile. The three provinces mentioned are the only ones having more than 300 to the square mile.

The British Isles though less in area by 7000 square miles than the Philippines have more than five times as great a density of population. Japan, of which only one-twelfth is deemed capable of cultivation, has nevertheless a density of population which multiplies that of the Philippines by $4\frac{1}{2}$. It will doubtless be many generations, perhaps centuries, before the islands are populated to the extent of their productivity. There is no tropical country more uniformly fertile throughout, or more susceptible of cultivation, or where the produce of a very limited area will sustain a greater population. The vast island of Mindanao has a population of but 14 to the square mile.

HEALTH CONDITIONS.

Health conditions in the Philippine Islands have been one of the chief topics for discussion among Americans since the occupation. The pioneers came here anticipating torrid heat, pestilential fevers, cholera, and plague, and they lived in constant dread of these deadly enemies of the human race. Indeed, if but a fraction of the doctrine be true, that the mind has a great influence over the body, there is little reason to doubt that much sickness and distress were caused in the early years of American rule by the bitter maligning this climate constantly received. Our soldiers imagined that amputation of limbs meant death, and a large number of wounded were being constantly shipped out of the country by army surgeons, themselves believing that the simple operation of amputation was here a very grave matter. Seven years have passed since then. Major J. M. Banister, of the medical corps of the army, made the following statement recently as the result of a preliminary study of the health of Manila :

“1. Aseptic results will just as surely follow aseptic methods in the Philippines as in the United States or Europe.

“2. Should septic infection occur in any clean case subjected to operation in the Philippines, blame the technique, not the climate.

“3. Successful attainment of the object for which operation has been undertaken will follow careful and skilful surgery in the Philippines, with the same regularity that we have been accustomed to observe in such work at home.

"4. Convalescence, after surgical operations in the Philippines, is rapid and satisfactory, when such operations have been carefully and skilfully performed."

The fact that Major Banister's statements have the endorsement of the leading physicians and surgeons of the islands proves conclusively that the first impressions of our army doctors were entirely wrong.

Major-General Wood in his report to the Civil Governor for last year states that there is nothing in the climate of Mindanao to prohibit a long residence there. He also calls attention to the fact that in Borneo and Java many Dutch and English planters live contented and happy lives. The Congress of physicians and surgeons which met only a few months ago in Manila, and which was composed of all the most prominent men of this profession in the Philippines, was unanimous in the assertion that the climate was conducive to health, if the simple rules of sanitation and hygiene were observed consistently.

Death is almost an unknown visitor among the Americans in the islands. This is due partly to the excellent precautions taken against such diseases as are liable to prevail, but mainly owing to the fact that none but young and vigorous men come here. Allowing for all things the fact remains that the average health of Americans in the islands is good. The fact is that we are away from home, and when we have stood it so long, and can't think of anything else to decry, the long-suffering climate has to stand scapegoat for our grievances.

Vital statistics of the Philippines need some analysis to be intelligible. The death rate is doubled by the neglect and faulty treatment of small children, half of whom die within twelve months from birth. Yet, in spite of this fact, the total death rate of Manila for all nationalities has steadily decreased since the American

occupation. The Board of Health is probably one of the most efficient in the world, and the effective control of the recent cholera outbreak may be cited as evidence of the new era of Philippine health.

The high winds that prevail are sometimes regarded as being very prejudicial to the climate. Such winds at their worst are less dangerous than the cyclones of the Middle West, and less frequent in occurrence. The average typhoon is almost unnoticed, and the people go about their work or recreations heedless of the weather. Far worse storms visit the blizzard-infected country of the Northwest, and far greater damage is done every year by storms in the home country than in the Philippines. The greatest damage done by these typhoons, or *baguios*, is to the shipping interests, but it is now stated with authority that in Philippine waters any vessel equipped with the latest instruments for predicting the approach of winds may always have time to make a port of safety. The Weather Bureau has made a thorough study of the laws that govern these "twisters," and for those who are prepared for them they have lost their terrors.

A distinguished visitor to Manila remarked that of all tropical countries none afforded an atmosphere like that of the Philippines. "This air," he said, "has about it a caress, a soothing quality that comforts and rests one after the day's work."

This same quality has been noticed by many persons, and could easily be lauded as some magic quality that lent a superhuman power to the climate. The facts are, however, that this genuine charm is due to just the right proportions of moisture and temperature in air that is free from impurities or extremes of stagnation or high winds. These qualities would produce a charm anywhere at any time, but the trouble is that just these ingredients are not elsewhere to be found, and so far no

one has been able to manufacture them. If the visitor wants to enjoy them he will have to come to Manila to find them. — *Manila Daily Commercial Bulletin*.

DEATHS OF AMERICANS IN THE PHILIPPINES

YEAR.	NO. OF DEATHS.	RATE PER M.
1899 (3 months)	5	5.468
1900	17	3.873
1901	39	8.886
1902	145	33.037 (cholera)
1903	92	20.961 (cholera)
1904	76	17.316
1905	79	18.000
1906	(soldiers) 8.65%	(civilians) 9.34

Average in the United States, 17.4.¹

The death rate among Chinamen for the year ending August 31, 1905, was 16.15; for Spaniards, 20.17; for Filipinos, 44.54; for other nationalities, 29.05.

It will be observed that in those races not affected by the infant mortality, the death rate is comparatively low. It should be stated that the death rate among American infants and children is relatively low.

Of course it is recognized that there is no place in the world suitable for and agreeable to all persons. This is true because there is so great a variety of physical natures that no single combination of climatic influences, however favorable, can be found which will satisfy all their requirements and conditions. The fact that some people who observe carefully the laws of right living do not retain their health in the Philippine Islands does not necessarily indicate that the climate is unhealthful. The same thing is true of any country in the world.

¹ Referring to general average in the United States, and not for 1906 alone.

Many Americans and Europeans enjoy better health in the Philippines than at home. Generally speaking, acclimatization is complete by the end of the second year and physiological adaptation thoroughly established, so that the normal expectation of health and life is as well assured as in the temperate zones.

The mortality statistics of the Philippines make an unfavorable showing because of the high rate of infant mortality, due to causes not always associated with the general climatic and health conditions of the country. The death rate in Manila, and probably in the entire archipelago, of persons over five years of age, will compare favorably with that of many cities of the United States.

DEATHS FROM DISEASE AMONG PHILIPPINE
SCOUTS, FOR THE FISCAL YEAR ENDING
JUNE 30, 1905.¹

CAUSES OF DEATH	NO. OF DEATHS.	MEAN STRENGTH. RATIO PER M.
Tuberculosis of lungs.....	13	2.82
Beriberi	7	1.52
Typhoid fever	3	.65
Malarial fever, pernicious	2	.43
Hemorrhage, cause unknown	1	.22
Purpura hemorrhagica	1	.22
Smallpox	1	.22
Acute dysentery	1	.22
Pneumonia	1	.22
Bright's disease	1	.22
Gonorrheal endocarditis	1	.22
Gangrene of the lungs	1	.22
Carbuncle	1	.22
Unknown.....	1	.22
	35	7.59

The above table shows by the army figures that the death rate of Filipino males enlisted is, exclusive of gunshot wounds, only 7.59 per thousand.

¹ A department of the regular army embracing native soldiers living under American army hygiene.

WAGE-EARNERS AND OCCUPATIONS

The following table shows the number of those engaged in the various occupations, which include practically all wage-earners.¹

OCCUPATION.	NUMBER.	PER CENT. OF TOTAL.
Farmers and farm laborers ²	1,236,327	40.7
Weavers and spinners	539,906	18.8
Day laborers	384,000	12.6
Merchants	137,311	4.5
Fishermen ³	116,799	3.8
Launderers	66,909	2.2
Seamstresses	65,285	2.2
Servants	54,523	1.8
Carpenters	38,230	1.3
Cooks	28,747	0.9
Sailors	23,027	0.8
Matmakers	22,272	0.7
Police and Constabulary	20,935	0.7
Distillers	15,379	0.5
Herdsmen	14,683	0.5
Coachmen	14,610	0.5
Tailors	14,201	0.5
Salesmen	13,165	0.4
Hatmakers	12,979	0.4
Clerks	12,360	0.4
Cigarmakers	11,036	0.4
Bagmakers	11,313	0.4
Boatmen	8,864	0.3
Musicians and music teachers	8,661	0.3
Nipaworkers	7,349	0.2
Embroiderers	7,224	0.2
Potters	6,125	0.2
Government officials	5,950	0.2
Teachers	5,362	0.2
Blacksmiths	5,185	0.2
Watchmakers and jewellers	4,794	0.2
Woodcutters	4,621	0.2
Shoemakers	4,445	0.2
Stevedores	4,272	0.1
Messengers	4,210	0.1
Saltmakers	3,602	0.1
Water carriers	3,390	0.1
Copramakers	3,128	0.1
Gardeners and florists	3,053	0.1
Bakers	3,026	0.1
Sawyers	2,967	
Agents	2,758	
Painters and glaziers	2,583	

¹ From the census of the Philippines taken under direction of the Philippine Commission in 1903.

² As explained elsewhere most of the people are engaged at farm work of some kind during a portion of the year, and a strict interpretation would assuredly raise the census estimate here given.

³ Assuredly greatly underestimated.

OCCUPATION.	NUMBER.	PER CENT. OF TOTAL.
Barbers and hairdressers	2,489	
Sextons and beadles	2,459	
Midwives	2,354	
Stonecutters	2,020	
Machinists	2,015	
Engineers and firemen	1,924	
Divers	1,767	
Cigarettemakers	1,714	
Ropemakers	1,698	
Physicians and surgeons.....	1,604	
Sugarmakers	1,366	
Butchers	1,315	
Pilots	1,273	
Basketmakers	1,266	
Bricklayers	1,172	
Clergymen	1,153	
Dyers and cleaners	1,080	
Bambooworkers	1,051	
Netmakers.....	1,046	
Prisoners	950	
Mechanics	940	
Packers and shippers.....	892	
Housekeepers and stewards	879	
Lawyers	862	
Wet nurses	808	
House builders (Nipa palm).....	757	
Tinsmiths	715	
Bartenders	709	
Confectioners	699	
Carriagemakers.....	653	
Firemen (fire department)	633	
Harness and saddlemakers	533	
Artists and teachers of art	530	
Ship carpenters	536	
Hunters	490	
Prostitutes ¹	476	
Accountants and bookkeepers	457	
Porters	445	
Coppersmiths	442	
Miners	418	
Tanners	396	
Printers	395	
Janitors	366	
Bankers and brokers	343	
Railway employees (steam and (street) ²	336	
Nurses	331	
Watchmen.....	301	
Photographers	276	
Manufacturers	260	
Hostlers	245	
Millers	244	
Palmworkers	239	
Letter-carriers	231	
Oilmakers	210	
Acolytes.....	205	
Draymen	189	
Telegraph and telephone operators.....	188	

¹ Of the 476 prostitutes almost all are in Manila and of all prostitutes seven-tenths were from foreign lands.

² Now greatly increased.

OCCUPATION.	NUMBER.	PER CENT. OF TOTAL.
Prison wardens	176	
Locksmiths	169	
Compositors	168	
Collectors.....	152	
Gamblers	143	
Draftsmen	138	
Lime-burners	137	
Interpreters.....	131	
Actors, theatrical managers	128	
Builders and contractors	127	
Iron founders	126	
Bookbinders	124	
Restaurant and saloon keepers	111	
Milliners.....	110	
Engineers, civil, etc., and surveyors ¹	108	
Showmen	100	
Soapmakers.....	98	
Sailmakers.....	95	
Hotel and boarding-house keepers	92	
Weighers	86	
Nuns	81	
Electricians	81	
Notaries	79	
Undertakers	68	
Lithographers	66	
Light-house keepers.....	65	
Turners	56	
Stenographers and typewriters ¹	52	
Literary and scientific persons.....	50	
Architects	41	
Dentists	38	
Telegraph and telephone linemen ¹	38	
Veterinary surgeons.....	37	

¹ Now greatly increased.

Occupations as indicated by per cent. of total population :

	Philippine Islands.	United States.
Agricultural pursuits	41.3	35.7
Professional service	0.8	4.3
Domestic and personal service.....	18.8	19.2
Trade and transportation	7.5	16.4
Manufacturing and mechanical pursuits	31.6	24.4

The employment of wage-earners as to sex are thus indicated :

	Philippine Islands.		United States.	
	Male.	Female.	Male.	Female.
Agricultural pursuits	57.8	8.8	39.6	18.4
Professional service	1.2	0.2	3.5	8.1
Trade and transportation	7.5	7.4	17.9	9.4
Manufacturing and mechanical pursuits .	12.1	69.9	24.3	24.7

Of the lawyers (total number 860) five-sixths were Filipinos; of priests (total number 1153) more than half; of physicians (total number 1604) 1326 were natives.

REPORT OF PHILIPPINE COMMISSION ON SCHOOL ENROLMENT AND ATTENDANCE 1905.

The number of primary schools increased from 2,233 in July, 1904, to 2,727 in March, 1905; the number of primary teachers from 3,585 to 4,457; but the enrolment in the schools increased far out of proportion to the increase of teachers and facilities for properly instructing these pupils. This astonishing growth of numbers attending schools is shown by the following statistics taken from different parts of the school year: July, 1904, 251,475; November, 1904, 345,018; March, 1905, 501,000, which is the number of children enrolled in the primary schools for the year. This constant rise in attendance was accomplished without compulsory attendance, and was to a very great degree due to a greatly awakened desire on the part of the Filipino parents for education for their children.

1906.

It was found that the enrolment in primary schools greatly exceeded the facilities, and directions have been

issued to exclude not only children below the age of six, but if necessary to make the age of entrance eight to nine or nine to ten years, and to insist upon regularity in attendance. The method formerly employed in reporting the enrolment of pupils was found to be *inaccurate* and was therefore discontinued. No account has been taken during the past year of the total enrolment except for the month of March, the last month of the school year, during which there was a total enrolment of 375,554,¹ made up as follows:

First grade	264,243	
Second grade.....	73,074	
Third grade	27,386	
	<hr/>	364,703
Intermediate:		
Fourth grade.....	6,139	
Fifth grade	2,710	
Sixth grade	1,448	
	<hr/>	10,297
Secondary:		
Seventh grade	446	
Eighth grade.....	95	
Ninth grade.....	13	
	<hr/>	554
Total enrolment		<hr/> 375,554

LITERACY IN 1902.

The following table shows the proportions of the literate population in 1902. A census at the present time would undoubtedly show an extensive improvement, since more than 400,000 children have yearly

¹ In regard to the above figures issued from the report of the Philippine Commission giving the enrolment for March, 1906, as 375,554, the word *enrolment*, in the opinion of the writer, Major McIntyre of the Bureau of Insular Affairs, and many others, should undoubtedly read *attendance*. That a mistake or misprint has occurred is obvious from the widely recognized fact that the attendance and enrolment in 1906 were both greater than in 1905.

taken advantage of the American public-school system for almost eight years.

The table refers to those of over ten years of age.

Can read	2,211,433
Men	1,161,925
Women	1,049,508
Can read and write	1,002,588
Men	735,564
Women	267,024
Have superior education	76,627
Men	59,020
Women	17,607

This table refers to ability to read more than the habit of reading; such reading as is general among all but the totally illiterate in the United States would doubtless bring the people into the class having a superior education.

PHILIPPINE DISTANCES

Table of distances direct in statute miles between Manila and the capitals or chief towns of the various islands or provinces. It will be noted from the following that the distances are much greater than generally supposed.

TOWN.	PROVINCE OR ISLAND.	ROUTE.	NO. OF MILES.
<i>From Manila to</i> Aparri	Cagayán, Northern Luzon	Steamer, via the north-west and northern coast of Luzon	480
Albay	North Luzon	Via Straits of San Bernardino, Visayan Sea, and Verde Passage	414
Bacolod	Negros Occidental, Visayan Islands	Via Guimará's Strait	308
Baguió	Benguet, North Luzon	Mindoro and China Seas .	515
Batangas	Batangas, South Luzon	Overland via Manila & Dagupan R.R.	143
		By wagon overland.....	59
		Via Verde Passage	111

TOWN.	PROVINCE OR ISLAND.	ROUTE.	No. OF MILES.
Bayombong	Nueva Viscaya, North Luzon	By horseback overland ..	134
Cagayán	Cagayán Sulu, Sulu Sea	By steamer.....	540
Catbalogan	Samar, Visayan Islands	By steamer.....	328
		Via Seas of Samar and Visaya and Verde passage	395
Cavite	Cavite, S. Luzon	By launch via Manila Bay	0
Cebú	Cebú, Visayan Islands	By steamer.....	357
		Via Visayan Sea, Mindoro Sea, and Verde Passage ..	466
Cotabato	Cotabato, Mindanao	By steamer.....	552
		Via Célebes Sea, Basilan Strait, Sulu and Mindoro Seas, Mindoro Strait, and China Sea	748
Cuyo	Cuyos Group, Sulu Sea	By steamer.....	257
Dapitan	Dapitan, Mindanao	By steamer.....	443
		Via Sulu and Mindoro Seas, Mindoro Strait, and China Sea	524
Davao	Davao, Mindanao	By steamer	610
		Via Davao Gulf, Sarangani and Basilan Strait, Sulu Sea, Mindoro Strait, and China Sea	995
Iligan	Isabela, North Luzon	Overland via trail	250
Iloilo	Iloilo, Panay, Visayan Islands	By steamer.....	297
Laoag	Ilocos Norte, N. Luzon	By steamer or along coast-road	211
Lingayén	Pangasinán, N. Luzon	By Manila & Dagupan R.R.	112
Lucena	Tayabas, S. Luzon	Overland.....	64
Misamis	Mindanao	By steamer.....	493
		Via Iligan Bay, Sulu Sea, Mindoro Strait, and China Sea	569
Nueva Cáceres	Ambos Camarines, S. Luzon	By steamer.....	116
Romblón	Romblón, Visayan Islands	By steamer	167
		Via Verde Passage.....	219
Santa Cruz	Laguna, S. Luzon	By steamer.....	34
Sorsogón	Sorsogón, S. Luzon	By steamer.....	236
Sulu	Sulu Islands, Sulu Archipelago, Sulu Sea	By steamer.....	595
Surigao	Mindanao	By steamer	459
Tacloban	Leyte, Visayan Islands	By steamer.....	360
		Via San Juanico Strait, Daram Passage, San Bernardino Strait, Mindoro Sea, and Verde Passage	414
Tárlac	Tárlac, N. Luzon	By Manila & Dagupan R. R.	69
Tuguegarao	Cagayán, N. Luzon	Overland or by steamer ..	211
Vigan	Ilocos Sur, N. Luzon	By steamer or Manila & Dagupan R.R.	210
Zamboanga	Mindanao	By steamer.....	561
		Via Sulu, Mindoro, and China Sea	585

TRANS-PACIFIC ONE-WAY THROUGH FARES FROM NEW YORK.

Via all authorized all-rail routes to San Francisco, thence via Pacific Mail Steamship Co., Occidental and Oriental Steamship Co., or Toyo Kisen Kaisha (Oriental Steamship Co.), or to Seattle, thence via Great Northern Steamship Co., or to Vancouver thence via Canadian Pacific Steamship Co.	First cabin with first-class accommodation overland.	Servants ¹ other than Asiatic with first-class accommodation overland.	Steerage with mixed class accommodation overland.
Yokohama, Japan	\$278.50	\$211.85	\$153.50
Kobe (Hiogo), Japan	286.00	216.65	157.50
Nagasaki, Japan	301.00	226.85	163.50
Shanghai, China	303.50	228.50	168.50
Hong-Kong, China (British)	303.50	228.50	168.50
Manila, Philippine Islands (United States), via Pacific Mail Steamship Co., Occidental and Oriental Steamship Co., or Toyo Kisen Kaisha and Nagasaki:			
Direct	303.50	228.50	168.50
Via Hong-Kong	328.50	253.50	193.50

¹ Via Pacific Mail Steamship Co., Occidental and Oriental Steamship Co., and Toyo Kisen Kaisha (Oriental Steamship Co.), only first-cabin passage beyond Hong-Kong.

ROUND-TRIP, BASING FARES AND REGULATIONS
FROM PACIFIC COAST.

From San Francisco, via Pacific Mail Steamship Co., Occidental and Oriental Steamship Co., or Toyo Kisen Kaisha (Oriental Steamship Co.); from Seattle, via Great Northern Steamship Co., or to Vancouver thence via Canadian Pacific S. S. Co.	First cabin.		Servants other than Asiatic.	
	Four. months.	Twelve. months.	Four. months.	Twelve months.
Yokohama, Japan	\$300.00	\$350.00	\$200.00	\$233.35
Kobe (Hiogo), Japan	312.50	365.00	208.35	243.35
Nagasaki, Japan	334.00	393.75	222.70	262.50
Shanghai, China	337.50	393.75	225.00	262.50
Hong-Kong	337.50	393.75	225.00	262.50
Manila, Philippine Islands, via Hong-Kong (see Steamship Companies, Hong-Kong to Manila, one way)	377.50	433.75	265.00	302.50
Via Pacific Mail Steamship Co., or Oceanic Steamship Co., to Honolulu, Hawaiian Islands..	135.00	.....¹	90.00	.....
From San Francisco via Oceanic Steamship Co., to Pago Pago, Samoan Islands	225.00	250.00	.....	.....
A new line out of Vancouver backed by Boston capital has recently put on a line at which all passage is intermediate at \$100.00 one way; accommodations are excellent.				

¹ Via Pacific Mail Steamship Co. or Oceanic Steamship Co. only.
Meals and berth on trans-Pacific steamers included in above fares.
Children five years of age and under twelve, half-fare through to trans-Pacific destination; under five years of age, free to San Francisco, Seattle, or Vancouver. On trans-Pacific steamers children two years of age and under five will be charged quarter-fare; under two years of age, free. One child only under two years of age will be carried free with each family, and additional children under that age will be charged quarter-fare.
For those who desire a reduction in transportation to Manila, arrangements can sometimes be made with the Quartermaster's Department, United States Army, for transportation via the Army transports. Transportation is free, but one dollar per diem while *en route* is charged for meals.
The Boston Steamship Co., operating the excellent steamers "Tremont" and "Shawmut" out of Seattle, makes a charge of but \$180 for first-class passage from Seattle to Manila, and a charge of \$100 for "intermediate" passage. The intermediate is very good, ranking above second cabin on other lines and does not differ materially from first-class passage, saving in accommodations.

FILIPINO COINS

Filipino silver peso — fifty cents American currency.

Filipino silver half-peso.

Filipino silver peseta, with a currency value of one-fifth of a peso.

Filipino silver half-peseta, with a currency value of one-tenth of a peso.

Filipino copper centavo, with a currency value of one one-hundredth of a peso.

The currency of the Philippines, it will therefore be observed, is simple, and will be readily borne in mind by any one who fixes upon the value of the peso (*i. e.*, fifty cents) and applies the decimal system as in the United States. The face value of coins is arbitrarily fixed by the Government. The fluctuations in specie value, however, have been considerable on account of the varying values of silver. The recent rise in value of silver and the fact that Philippine coins are exchangeable on their face value for gold has led to the exportation of the coins in considerable amounts. At the present time this is forbidden and a recoinage of the currency into coins of less intrinsic value is being undertaken. Travellers should remember that exchange in Oriental countries is done on the basis of gold. Thus to change Japanese money into Philippine currency one may pay two exchange rates, first on changing Japanese coins into gold and second in reducing the gold to terms of Philippine money. Philippine money is generally called “Conant,” to distinguish it from United States currency. An excellent report entitled “Coinage and Banking in the Philippine Islands” was made by Charles A. Conant to the Secretary of War in 1901.

WEIGHTS AND MEASURES

Measure (metric) terms in most common use:

Hectoliter	{ 2.838 United States bushels. 26.417 United States gallons.
Kilogram	2.2046 United States pounds.
Kilometer	0.62137 United States mile.
Liter	1.0567 United States quarts.
Meter	39.37 United States inches.
Meter, square	10.764 United States feet.
Meter, cubic (stere)	{ 1.307 United States cubic yards. 35.3 United States cubic feet.

The natives measure and sell rice and paddy by the caván and its fractions. The caván dry measure is as follows, viz:

4 apatáns . . .	1 chupa.
8 chupas . . .	1 ganta.
25 gantas . . .	1 caván.
1 ganta . . .	3 liters or 3.1701 United States quarts.

The equivalents of which in United States measures are:

1 apatán . . .	0.16875 of a pint.
1 chupa . . .	0.675 of a pint.
1 ganta . . .	2 quarts, $1\frac{1}{2}$ pint.
1 caván . . .	16 gallons, 3 quarts, 1 pint.

GRAIN AND LIQUID WEIGHTS AND MEASURES

1 cavan	25 gantas — 75 liters.
1 ganta	8 chupas — 3 liters.
1 chupa	$\frac{3}{8}$ liter.

Although the metrical system has been officially adopted in the Philippines, the following weights and measures of Spanish origin are more or less in use, viz:

Arroba (dry) — 25 libras — 25.36 pounds.

Arroba (liquid) — 4.263 gallons.

Bayon, a woven grass sack of indefinite capacity for the transportation of Filipino sugar.

Fardo, a local weight for tobacco, — 33 Spanish pounds — 33.475 United States pounds.

League — linear measure 2.634 United States miles.

Libra — weight measure 1.0144 pounds.

Milla — linear measure, 1,760 yards, or 1,609.3 meters.

Pie — linear 0.9478 foot.

Quintal (dry) — 4 arrobas — 101.44 pounds.

Quintal (metric) — 220.46 pounds.

Ton, weight, — 20 metric quintals.

Ton (tonelada), space measure, — 40 cubic feet.

Vara, linear measure — 0.914117 yard, or 33.384 inches, United States.

1 hectare, land measure, Spanish, — 2.471 United States acres.

1 quinón, land measure, 100 loanes, — 2.79495 acres.

METEOROLOGICAL TABLE.

Mean monthly temperature of Manila for twenty years—1883-1902—together with annual temperatures. These temperatures are expressed in terms of centigrade “°C.” To reduce degrees of centigrade to degrees of Fahrenheit, if above the freezing point, multiply the number of degrees by 9, divide product by 5, and add 32 to quotient. Thus $100^{\circ} \times 9 \div 5 = 180^{\circ}$; and $180^{\circ} + 32 = 212^{\circ}$.

YEAR	JAN.	FEB.	MAR.	APRIL.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	AVERAGE.
1883.....	25.2	25.6	27.7	28.2	28.7	27.1	26.7	27.4	26.5	26.5	26.0	24.1	26.6
1884.....	23.6	24.7	26.4	27.8	28.2	27.0	26.3	26.5	26.6	26.6	25.9	24.3	26.2
1885.....	24.6	24.4	26.1	27.3	28.5	28.3	27.3	27.1	27.6	27.3	26.4	25.2	26.7
1886.....	25.2	24.7	26.4	28.3	28.5	27.5	27.0	27.5	27.1	26.6	26.0	24.9	26.6
1887.....	25.2	25.3	26.7	27.7	27.7	27.6	27.1	27.3	26.3	26.4	26.1	25.4	26.6
1888.....	24.9	25.2	27.5	28.7	29.2	27.8	26.1	27.2	27.5	26.3	26.5	26.0	26.9
1889.....	25.8	26.4	27.5	29.4	30.3	28.7	27.5	27.3	27.5	27.1	26.5	24.9	27.4
1890.....	25.6	25.9	27.3	27.9	27.9	27.3	27.3	27.4	26.5	26.1	25.4	25.2	26.6
1891.....	24.6	25.0	26.7	28.6	29.8	27.6	26.8	26.6	26.8	27.4	26.3	25.5	26.8
1892.....	25.3	26.0	27.1	28.0	28.8	28.1	27.3	27.0	26.7	27.1	25.8	25.0	26.9
1893.....	24.1	25.4	26.5	28.3	27.8	27.7	27.3	27.7	26.6	26.5	25.7	25.4	26.6
1894.....	24.7	25.0	26.6	28.2	28.0	27.7	27.2	27.3	26.8	26.9	25.6	25.0	26.6
1895.....	24.7	25.1	26.7	28.3	28.0	27.7	27.5	27.1	26.9	27.5	25.8	25.1	26.7
1896.....	24.6	25.8	27.2	28.4	27.6	28.0	27.3	26.4	27.2	27.2	26.4	25.3	26.8
1897.....	25.7	26.3	27.7	29.0	29.4	29.5	27.5	27.1	27.2	27.3	26.8	25.5	27.4
1898.....	25.5	26.2	26.3	27.9	28.2	27.6	26.7	27.3	27.2	26.9	26.1	25.7	26.8
1899.....	25.3	25.0	25.7	27.9	28.1	27.5	27.0	27.3	27.3	27.0	25.8	25.7	26.6
1900.....	25.1	26.0	27.5	28.9	29.8	28.3	27.7	27.4	27.5	27.2	26.5	25.5	27.3
1901.....	25.3	25.2	26.6	28.4	28.9	28.3	27.6	26.8	27.7	27.0	26.4	25.0	26.9
1902.....	25.4	24.0	26.7	28.1	28.8	28.2	27.2	27.0	26.7	28.8	26.1	25.8	26.7
Average.....	25.0	25.4	26.8	28.3	28.6	27.9	27.1	27.1	27.0	26.9	26.1	25.2	26.8

A CLASSIFICATION OF PHILIPPINE FOREST TREES AND WOODS

Lauan (*Dipterocarpus thurifer* Blanco) is probably the most abundant commercial lumber in the Philippine Islands, though not as much used as molave. It grows to enormous heights; is light, strong, fibrous, easily worked, and does not split. Some of the trees run up as high as one hundred and twenty-five or one hundred and forty feet before branching, and the logs are breast-high. There are two species of lauan, one called *lauan mulato*, which is of a dark red color and is deemed more valuable than the white variety. Nevertheless both are valuable. Lauan, for its abundance, is commercially the pine of the Philippines. It is not as high priced a wood as molave.

Another wood used extensively for construction purposes is the yacal (*Hopea plagata* Vidal), belonging also to the superior group, and of the same family as the molave. The logs come seventy feet long and forty inches or more in diameter. Yacal is used extensively for beams, joists, pillars, etc. The timber is yellowish. In order of tensile strength it ranks second among the Philippine woods, being exceeded by the Dungon only; it is often called iron wood. Its transverse resistance is so great that a beam of it is preferred to other kinds double its diameter.

Batitinan (*Lagerstraemia batitinan* Vidal) is the teak wood of the Philippines. The logs come forty-five to fifty feet in length, quite straight, and twenty inches or more in diameter. The lumber looks dark gray, and puts one in mind of black oak; it is deemed superior to

the famous teak of India, because it is stronger and more elastic, and stands salt water better than almost any other wood. This timber is especially plentiful in southern Luzon, Negros, and the Visayan Islands. For cabinet purposes and furniture many foresters consider it preferable to black walnut. The wood belongs to the first group. Like practically all the woods mentioned in this article, except calentas (Philippine cedar), lauan, and guijo, it will not float even when dry.

Mangachapuy (*Vatica mangachapuy Blanco*) is a tree of the first order, and makes the best timber for masts in the islands. The logs come sixty feet or more in length, very straight, and twenty inches in diameter. It weighs about sixty-three pounds to the cubic foot; water has specific gravity of 62.425. Some of the mangachapuy logs will float when dry.

A tree used for the same purposes as mangachapuy, though not as valuable, is the guijo (*Shorea guiso Blume*). The strong demand for this wood in the markets of China, where it is extensively used by carriage and cart makers for wheels, and for naval construction, testifies to its great value. It gives logs up to seventy-five feet long by twenty-four inches square. Following is the mean result of tests made with guijo: Elasticity, 0035 m.; broke with weight of 40.7469 kilograms; weight in the air, 9.73 grammes; specific gravity 0.685, it being one of the lightest of the woods mentioned.

An excellent wood is the dao; it is listed but not described in the Government forestry book, where the trees are listed only according to present demand; it resembles a huge sycamore. The writer has seen a dao close to a hundred feet high and perhaps eight feet in diameter, very symmetrical in appearance.

A good construction wood is the catmon (*Dillenia Philippinensis Rolfe*). The logs attain a length of

forty-five or fifty feet, and a diameter of twenty inches. The wood is good for any inside construction, as ants do not attack it readily. In color the timber is red, and when freshly cut looks like a fine beefsteak. It belongs to the second group.

One of the large construction woods is the apiton (*Dipterocarpus grandiflorus* Blanco). The tree is exceedingly abundant and makes excellent piles, standing salt water splendidly. It reaches a maximum height of one hundred and fifty feet, and logs can be secured one hundred feet long and breast high. It runs sixty inches in diameter, with a very even bole. I knew of an instance where a forester undertook to deliver a large quantity of apiton for piles at eighty feet. When it is considered that even California redwood piles seldom reach this length, the great value of this tree is easily seen. At the present time the apiton belongs to the third group, though it must be understood that the woods are listed only according to present demand, and not according to the value they will have when better known and more exploited.

Another large wood is the supa (*Sindora Wallichii* Benth). Like the apiton, the supa is found near the beach in low elevations. It is rarely found more than ten miles from the coast, and for this reason it is well known commercially. The tree grows to a height of from ninety to one hundred feet at maturity, with a uniform bole all the way up to fifty feet, where it branches. It resembles the white oak of the United States.

The betis (*Azola Betis* Blanco) is a tree of the first group. It runs from twenty-five to forty feet long and twelve to seventeen inches square — special sizes from sixty to sixty-five feet long and eighteen to twenty inches square. It resists sea-worm, is used in salt and

fresh water piling, also for keels, and many other purposes.

Dungon (*Heritiera sylvatica* Vidal). This extraordinary wood is perhaps the last that should be mentioned in this chapter as coming under the head of the best known and most used construction woods; for in mentioning these woods the writer is indicating those which would be found in the sawmills of Manila or Hong-Kong. Logs come about thirty-six feet long and eighteen inches square, with special sizes of fifty feet in length. Dungon is called "ironwood," and is so hard that a stroke from an ordinary broad-blade axe produces hardly more than an impression upon its surface. A proof of its hardness is the fact that it is used in the manufacture of cog-wheels, even when the cogs are thin and narrow. Dungon has greater tensile strength than any other wood in the Philippines. It is used extensively in building. Sometimes, though not usually, the wood has knots which weaken its transverse strength, and from which exudes a gum which becomes hard and renders it so difficult to work that the tools often break.

CABINET WOOD. Perhaps chief among the cabinet woods is the magnificent tindalo (*Afzelia Rhomboidea* Vidal), belonging to the superior group. Tindalo weighs from sixty-eight to seventy pounds to the cubic foot. Logs generally come about forty feet long and sixty inches in diameter. It is superb for the manufacture of chairs, tables, panels, and flooring. In describing tindalo one cannot do better than quote from the Rev. José Delgado:—

"Among the many magnificent woods found in the forests of these islands one of the most useful and precious is that which the Tagals call tindalo. It is found on all the islands. The trees are very large, straight, and tall. It can be used in almost all construction. For some purposes it is superior to molave.

The wood is of a beautiful red color, and in time takes on a deeper hue. It is very durable when exposed to the weather. For inside construction it forms one of the most valuable jewels of the house, where it remains permanently, and impervious to decay. It is very much esteemed in Manila, where beautiful desks and large tables, which are highly esteemed, are made from this wood; also very unique chairs and stools, railings and bedsteads, artistically turned. It is even more esteemed in China, where they say it sells for its weight in silver, and is valued as such. They make from it many curious desks and stools and chairs; they also know how to preserve in the wood the blood-red color, washing it frequently with salt water. In time, if care is not taken, it changes to a dark claret color, but is very lustrous. It can be polished to such a degree that one's face can be seen in it as in a mirror."

Another cabinet wood, belonging also to the superior group, is the narra (*Pterocarpus Indicus Willde*), or Philippine mahogany. The narra is an immense tree; logs from it are got forty feet long and seven feet in width, while the roots and branches are also available for lumber. Sometimes seven or eight immense logs can be got out of one tree. Often the roots extend in flanges or buttresses from the bole of the tree, beginning at a height of twenty-five or thirty feet from the ground, and when they reach the ground the tree has a diameter of from forty to fifty feet. The photograph here shown was taken by the writer; and the tree is believed to be the largest narra which has yet been discovered in the Islands. From its enormous roots one could hew a table in one solid piece thirty feet long and eighteen feet wide. There are two kinds of narra, one golden straw-yellow, and the other carnation to blood-red; the yellowish variety is the more common, but all are equally valued. The wood admits of a fine polish, and is much used in cabinet-making. It has somewhat of an open grain.

Narra is a first-rate wood for general purposes. In

the London market it is classed with the Padouk of Burmah. It is found in the virgin forests, and is by no means scarce. Major Ahern, Chief of the Insular Forestry Bureau, states that though an idea is prevalent that Philippine mahogany is scarce, it is found in abundance in many places throughout the islands. The heartwood of the narra, even in the whitish varieties, contains blood-red streaks running through it; and when the wood is cut, it bleeds a blood-red sap. Cups are made of narra wood which, when water is poured into them, impart a bluish tinge to the water, which is then deemed to be good for dropsical diseases. A variety of the narra, called narra blanca, though not the proper Philippine mahogany, is sometimes sold as such.

A superb cabinet tree is the camagon (*Diospyros Discolor Willde*), which belongs to the ebony family. The wood, which is jet black or ashy red, with bright or pale yellow streaks, is of a dense texture, fine fibre, and slow growth. It is extensively used in making fine furniture and objects of art; but while not very rare, it is not plentiful. Timbers come twenty feet long and fifteen inches in diameter.

A valuable wood, which, though by no means rare, is never found very plentifully in any one locality, is the Philippine ebony (*Diospyros Nigra*, family *Ebenaceæ*). The timbers come about nine feet long and twenty inches round. Only the heart of the tree, about one-third, is the black ebony of commerce. Two-thirds of the tree is sap wood. In the Island of Masbate there is a bridge built of solid ebony, the various pieces being lashed together with bamboo. The tree prefers rocky or sandy ground; once, on stopping on a little island off the coast of southern Luzon I counted eight of them within half an hour. The wood brings a tremendous price in London, Hong-Kong, and Madrid.

A beautiful palm in the Philippines, suitable as a cabinet wood, is the palma brava. The logs come a foot in diameter and eighty feet long. The wood makes fine pillars and takes on a superb polish. It is jet black, with bright brown streaks running through it as though they had been inlaid. The trunk consists of a light sapwood about one-sixteenth of an inch thick, and a pith in the interior. It is very strong, like a steel tube, and will carry an immense weight. To chop this wood will blunt the strongest instrument. It is quite plentiful in the Philippines, and the natives use it a great deal in making stakes.

LAND TITLES.

Americans intending investing in the Philippines should be very careful about their titles. Although the laws ensure as stable titles as in any country in the world, yet many of the native population have not as yet taken advantage of these laws, nor have their titles been properly recorded. For this reason, in the absence of ordinary precautions, the purchaser may find himself involved in expensive litigation. Write the Department of Justice, Manila, P. I., and secure full and authoritative information.

The Torrens system of Land Registration in the Philippine Islands is very similar to the Torrens system adopted by several States of the Union. The title is absolutely unassailable. A petition is presented by the applicant to the Land Court, reciting that he is the owner of the land, accompanied by his documentary evidence thereof, giving the names of the owners of the adjoining property. The latter are cited, as well as all persons who may appear to have any interest therein, including the Attorney General as representative of the

Government; and a notice of the application is published to all the world. Any person may, within a specific period, present his opposition thereto, after which the trial proceeds substantially as in other courts. It is not incumbent on any one to register under the new Act, the old system of titles remaining in full force.

CONDITIONS OF SUFFRAGE IN THE PHILIPPINES.

On July 30, 1907, the people of the Philippines voted for the eighty-one members of their first native legislative body. The assembly is a representative Filipino body, there being no American aspirants for political honors. It will stand alone as a legislative body, so that its success may not be attributed to assistance from anybody.

The Philippine inhabitants will begin their ultimate autonomy with a larger measure of suffrage than has been achieved by most peoples except after centuries of political struggle. The suffrage is necessarily considerably restricted. Besides the provision that the voters must be men twenty-three years old, the other requirements are that they must know how to read, write, and speak English or Spanish; that they own real estate valued at 500 pesos a year or pay thirty pesos a year in taxes; that they have not violated the oath of allegiance, have not borne arms against the United States since May 1, 1901, and that they have not failed to pay taxes since 1898. The necessity of curtailing the voting powers of the more ignorant is apparent. The restrictions will prove educational in elevating the masses to the plane of citizenship.

This body may be compared in a general way to our

House of Representatives, while the Philippine Commission will be the upper house or senate, and the acts of the assembly must secure the approval of the Commission in order to become laws.

On the other hand, the assembly will be able to defeat any proposed legislation which does not meet its views. The opportunity that will thus be opened to the Filipinos to make known their wants and wishes and to show how far they are prepared to take their government into their own hands is confidently expected to have good results politically and otherwise.

PHILIPPINE CUSTOMS DUTIES.

The duties on articles between the Philippine Islands and foreign countries are — subject to the Act of the Philippine Commission of September 17, 1901 — identical with those between the United States and foreign countries. The duties between the Philippines and the United States are — subject to the same enactment — seventy-five per cent of those between the Philippines and foreign countries.

On September 17, 1901, the Philippine Commission enacted “by the authority of the President of the United States, and with the approval of the Secretary of War first had,” Act No. 230, of which the following is a synopsis:—

SHORT TITLE. — SECTION 1. The provisions of General Order No. 49, Office of the United States military governor in the Philippine Islands, dated October 23, 1899, relating to customs duties on imports and exports of the Philippine Islands, and tonnage duties and wharf charges therein, and the several orders supplemental thereto and amendatory thereof, are hereby amended as follows :

IMPORT DUTIES. — SEC. 2. Duties shall be collected on all articles imported into the Philippine Islands at the rates

hereinafter provided, except when expressly exempted from duty by this act.

PROVISIONS FOR MERCHANDISE IN TRANSIT. — SEC. 3. Merchandise in transit at the time the present revision goes into effect may be entered under the provisions of law existing at the time of shipment; provided, however, that this privilege shall not be extended beyond the period of sixty days after the date of the enforcement of the present tariff.

EXPORT DUTIES. — SEC. 4. Duties shall be collected at the rates hereinafter provided on such articles exported from the Philippine Islands as are hereinafter specifically prescribed.

GENERAL RULES. — SEC. 5. Rules to be observed in the construction and enforcement of the provisions of this act are given in detail.

PROHIBITED IMPORTATIONS. — SEC. 6. Explosives, arms, etc., except by authority; obscene literature and gambling devices.

ABBREVIATIONS. — SEC. 7. The following abbreviations shall be employed in the tariff:

G. W. — gross weight.	Kilo. — kilogram.
N. W. — net weight.	Kilos. — kilograms.
Hectog. — hectogram.	Hectol. — hectoliter.

HOW PAYABLE. — SEC. 8. Duties shall be paid in United States money, except that —

The following coins now in circulation in the Philippine Islands shall be received for customs duties and taxes at the following rates in money of the United States: Peso, 50 cents; medio peso, 25 cents; peseta, 10 cents; media peseta, 5 cents; but such rates shall be changed in accordance with a quarterly proclamation of the Civil Governor.

METRIC SYSTEM. — SEC. 9. The metric system of weights and measures as authorized by Sections 3569 and 3570 of the Revised Statutes of the United States, and at present in use in the Philippine Islands, shall be continued.

The meter is equal to 39.37 inches.

The liter is equal to 1.0567 quarts, wine measure.

The kilogram is equal to 2.2046 pounds avoirdupois.

IMPORTATIONS FROM THE UNITED STATES. — SEC. 10. Importations from the United States are dutiable under the provisions of this act, but no customs duties shall be imposed on articles transported only from one place to another in the Philippine Islands.

RATES. — SEC. 11. Duties on articles imported into the Philippine Islands shall follow the usual classification in the United States schedules.

FREE. — SEC. 12. Free list.

EXPORT DUTIES. — SEC. 13. On the following products of the Philippine Islands there shall be levied, on the gross weight thereof, export duties as follows:

398.	Abáca, raw or wrought hemp . . .	100 kilos	\$0.75
399.	Indigo	do	.25
400.	Indigo employed for dyeing (<i>tintarron</i>)	do	.025
401.	Rice	do	1.00
402.	Sugar	do	.05
403.	Cocoanuts, fresh and dried (<i>copra</i>) .	do	.10
404.	Tobacco, manufactured, of all kinds and whatever origin	do	1.50
405.	Tobacco, raw, grown in the provinces of Cagayan, Isabela, and New Bis- cay (Luzon Islands)	do	1.50
406.	Tobacco, raw, grown in the Visayas and Mindanao Island	do	1.00
407.	Tobacco, raw, grown in other prov- inces of the archipelago	do	0.75

Certificates of origin of raw tobacco may be required by the customs authorities when proof of the place of production is necessary.

TONNAGE. — SEC. 14. Tonnage dues.

TONNAGE. — SEC. 15. Exemption from tonnage dues.

WHARF CHARGES. — SEC. 16. Wharf charges on exports.

EXEMPTIONS. — SEC. 17. Exemptions from wharf charges.

REIMPORTATIONS. — SECS. 18 and 19. Reimportation of in-
sular products.

REPEALING. — SEC. 20. Repealing clause.

REPERTORY AND INDEX. — SEC. 21. Repertory and index.

TITLE. — SEC. 22. Title of act "Tariff Revision Law, of 1901."

IN EFFECT. — SEC. 23. Tariff law takes effect November 14, 1901.

This tariff enactment of the Insular Commission was accepted by an act of Congress approved March 8, 1902. It will be noted that the act of the Commission makes no substantial changes from the prevailing tariffs of the United States other than those required by a recognition of Philippine conditions. The Congressional enactment merely confirms the enactment of the Commission. Its most important provisions are:

That the provisions of "An act to revise and amend the tariff laws of the Philippine Archipelago," enacted by the United States Philippine Commission, September 17, 1901, shall remain in full force, and there shall be levied, upon all articles imported from the United States, the rates of duty which are levied upon like articles imported from foreign countries.

SEC. 2. That there shall be levied upon all articles coming into the United States from the Philippine Archipelago the rates of duty which are levied upon like articles imported from foreign countries: *Provided*, That upon all articles the growth and product of the Philippine Archipelago there shall be levied only seventy-five per cent of the rates of duty aforesaid: AND PROVIDED FURTHER, That the said rates of duty shall be less any duty or taxes paid thereon upon shipments from the Philippine Archipelago, as provided by the act of the United States Philippine Commission referred to in section one of this act, under such rules and regulations as the Secretary of the Treasury may prescribe; but all

articles, the growth and product of the Philippine Islands, admitted into the ports of the United States free of duty under the provisions of this act, and coming directly from said islands to the United States for use and consumption therein, shall be hereafter exempt from any export duties imposed in the Philippine Islands.

SEC. 3. That the same tonnage taxes shall be levied upon all foreign vessels coming into the United States from the Philippine Archipelago which are upon vessels coming into the United States from foreign countries: PROVIDED, HOWEVER, That until July 1, 1904, the law restricting to vessels of the United States the transportation of passengers and merchandise from one port of the United States to another shall not be applicable to foreign vessels engaging in trade between the Philippine Archipelago and the United States, or between ports in the Philippine Archipelago: AND PROVIDED FURTHER, That the Philippine Commission shall be authorized to issue licenses to engage in lighterage or other harbor business to vessels actually engaged in such business at the date of the passage of this act, and to vessels built in the Philippine Islands or in the United States and owned by citizens of the United States or by inhabitants of the Philippine Islands.

SEC. 4. That the duties and taxes collected in the Philippine Archipelago in pursuance of this act, and all duties and taxes collected in the United States upon articles coming from the Philippine Archipelago and upon foreign vessels coming therefrom, shall not be paid into the general fund of the Treasury of the United States, but shall be held as a separate fund and paid into the Treasury of the Philippine Islands, to be used and expended for the government and benefit of said islands.

FUTURE INDEPENDENCE.

The following from a letter of the Secretary of War of the United States, dated March 16, 1905, and shortly after that time given to the press of the country, is and is considered to be the definite and accepted statement of the policy of the American administration regarding the present retention and future independence of the islands. It will be noticed that immediate independence is impracticable :—

“The policy of the administration is the indefinite retention of the Philippine Islands for the purpose of developing the prosperity and the self-governing capacity of the Filipino people. The policy rests on the conviction that the people are not now capable of self-government, and will not be for a long period of time; certainly not for a generation, and probably not for a longer time than that, and that until they are ready for self-government it would be a violation of trust for the United States to abandon the Islands.

“The question as to the future, however, is one wholly of conjecture. The important fact is the present policy, which is that of the indefinite retention of the Islands. What shall be done in the future when the people have reached a condition where they can be safely trusted with their own government is a question which will doubtless have to be settled by another generation than the present, both of the American and of the Philippine people, to whose wisdom and generosity we may safely trust the solution of the problem. Should the Philippine people, when fit for self-government, demand independence, I should be strongly in favor of giving it to them, and I have no doubt that the American people of the next generation would be of the same opinion. I think it much more likely, however, that after the Filipino people shall have been associated with the American people for a generation or more, and shall have tasted the prosperity they will find behind the national tariff wall, they will prefer a relation to America like that of Canada or Australia to England to one of absolute independence.”

INDEX

INDEX

- "ABACA," 204
Abaca, see hemp
 Accountants' wages, 180
 Act of July 1, 1902 (Public No. 235), 105, 106, 114, 115, 120, 248
 Act of June, 1901, 110
 Acts of Congress relating to Philip-
 pines, 120
 Acts of Philippine Commission, 120,
 121
 "Address by Hon. W. H. Taft," 228
Agave (hemp), 204
 Age at which Filipinos marry, 60, 97
 Aglipay, a branch from Catholic
 Church, 324
 Agricultural bank, 26, 238
 Agricultural course offered in school,
 80
 Agricultural experiment farms, 174
 Agricultural implements, 175, 214-
 216, 328, 341
 Agricultural products, 158-160
 Agricultural Relief Bill, passed by
 Congress, 117
 Agriculture, 157-175, 206, 353
 Agriculturist class, 98, 99, 174, 282,
 302
 Agriculturists, rate of interest to, 26
 Agriculturists to be benefited by rail-
 roads, 16, 23
 Aguinaldo, Gen. Emilio, 148, 149,
 155, 156
 Agusan River, 7
 Ahern, George P., 134
 Albay, 21
 Albay Province, 21, 186, 193, 197
 Albay (Mayon) Volcano, 5
 Alden, Wm. A., Company, of Boston,
 167
 Alligator pear, 158
Almaciga, a varnish, 134
 Alphabet, Filipino, 138
 Ambos Camarines Province, 21, 193,
 197, 348
 Ambos Camarines Province, Governor
 of, quoted, 301
 American army in Philippines, 34, 35,
 81, 297
 "American Cruiser in the Far East.
 Travels in the Philippine Islands,"
 69
 American goods in competition with
 European, 329-340
 American goods in Philippines, 328
 American goods, market for, 20, 21
 American influences, 94
 American intervention in Philippine
 affairs, 104-106
 American machinery, 130, 131, 162,
 163, 213, 214, 216, 234, 250, 259,
 262, 326-328, 352
 American occupation, 3, 104-106, 135,
 148, 149, 155, 156, 179, 251, 307-
 311, 317, 318
 American occupation compared to
 various colonial governments, 71
 Americans in the Philippines, 15, 16,
 29-36, 38, 189, 194, 195, 202-204,
 213-215, 244, 289, 290, 307-311
 Americans misjudge Filipinos, 100,
 101
 Amoretti, —, of Madrid, 156
 Ancestor-worship, 138
 Anderson, George P., 81
 Animals, domestic, 12
 Animals, predatory, 12
 Antimony, 185
 Antipolo, 23
 Aparri, 19, 218
 Apo Volcano, 5
 Arab missionaries, 137
 Araullo, Judge Manuel, 294
 "Archivo del Bibliófilo Filipino,"
 156, 295

- Arellano, _Chief Justice Cayetano, 294
 Aretana, Attorney-General Gregorio, 294
 Argus River, Mindanao, 253, 254
 Arrowroot, 159
 Artistic tastes of Filipinos, 294
 Asphalt, 185
 Assembly, Filipino, 115, 283
 Attorneys, American and Filipino, 111, 283, 294, 295

 BACALOT, 19
 Baguio, Benguet Province, 22, 27, 272, 276
Baguios, or high winds, 10
 Balutaca River, 350
 Bananas, 158, 159, 190
 Banaue, Luzon, 81
 Bandholtz, Col. H. H., 114
 Bandits, 287, 318
 Banks, 26, 34
 Baptism of infants, 57
 Baptist Church in Philippines, 324
Barangay, native boats, 218
 Barbed wire, 216
 Barrows, Dr. David P., quoted, 41, 86, 89, 156, 325, 353-355
 Basilan Island, 169
 Batán, 20
 Batán Island, 184, 186
 Batanes group of islands, 173
 Batangas, 22
 Batangas Province, 22, 160, 163, 164
 Bathing, 62, 303
 Beer, 181, 328
 Beet sugar, cost of producing, in United States, 235
 Benguet, Luzon, 186
 Benguet (Luzon) coffee, 163, 164
 Benguet mountain road, 22, 272, 276
 Bicol Filipinos, 347, 348
 Bilibid prison, 282, 356
 Birds, species of, 11
 Births made much of, 57, 61
 Blacksmiths' wages, 357
 Blumentritt, Ferdinand, 69
 Bogobo tribe, 350
 Bohol, area, 5
 Boiler-makers' wages, 357
 Bombay hemp, 19
 "Bontoc Igorot, The," 55
 Bontoc Province, 186
 Boots and shoes imported from United States, 328
 Bournes, Frank S., 55
 Bowring, Sir John, 69
 Bow-string hemp, 191
 Boys' Agricultural Institute, Tuguegarao, Luzon, 80
 Bravery of Filipino troops, 97
 Brewing industry, 181, 328
 Brick-masons' wages, 180
 British rule in India compared to American occupation of Philippines, 71
 Broom and brush factory, 165
 Broom corn, 158, 165
 Bulletins, Government, 87, 134, 175, 176, 204, 250
 Burbank, Luther, pupil of, experiments with oranges, 159
 Burchfield, Captain J. L., 202
 Bureau of Agriculture, Philippine, 198, 204
 Bureau of Government Laboratories, 133
 Burnham, D. H., 267
 Burritt, Lieut. Charles H., 188
Buyo, a species of pepper, 170
 By-products, utilization of, 258

 CABANATUAN, 23
 Cabinet-makers' wages, 180
 Cablegrams, cost of, 333
 "Cable News, The," 35
 Cacao culture, 164, 165
 "Cacao: A Treatise on the Cultivation and Curing of Cacao," 176
 Caciquism, 107
 Cacle lines, 27
 "Café, Le," 176
 Cagayan Province, 186, 213, 220, 221, 225
 Cagayan Province, Governor of, quoted, 225

- Cagayan River, 7, 215, 218-220, 222, 223, 226
- Cagayan Valley, 19, 23, 66, 122, 132, 144, 208, 212, 213, 215, 217-222, 224, 228, 243, 356, 358
- Calamba, Laguna Province, 272, 291
- Calasiao, Pangasinan Province, 175
- Calcutta hemp, 191
- Calentas*, Philippine cedar, 124
- Camarines Sur Province, Luzon, 186
- Camote*, a species of sweet potato, 158
- Camp One, 22, 272
- Candles, 260
- Capital, Filipino native, 239
- Capital for transportation developments, 254
- Capital, need for, 340
- Capiz, 20
- Caraballo Mountains, 358
- Caraballo Pass, 277
- Carabao, 11, 12, 172, 173, 276, 279
- Carpenters' wages, 357
- Carpets, 262
- Carretas*, 329
- Carromatos*, native vehicles, 264, 268, 329
- Cash payment for labor, 339, 351
- Cassava, 159
- "Catálogo Abreviado de la Biblioteca Filipina," 47, 295
- Catalogues for Filipino trade, 332-335
- Catholic Church, power of, 73, 150, 153, 265, 302, 313-324
- Catholic population, 8, 44, 45
- Catholic religion taught by the Span-
ish, 91
- Catipad*, a young man serving for
his bride, 61
- Cattle, 172, 276
- Cattle food, dearth of, 258
- Cavite, 154, 180, 319
- Cavite Province, 22
- Cebú, 25, 233, 243, 273
- Cebú Island, 4, 12, 16-18, 20, 124,
186, 232
- Cebú Province, Governor of, quoted,
302
- Cedar timber, 124
- Cement, 260
- Census, 157
- "Census of the Philippines," 41, 60,
102, 180, 188, 205, 228, 269, 325
- Character of Filipinos, general esti-
mate of, 100-102, 300-302
- "Characteristics of Christian Tribes,"
102
- Chico de Itaves River, 223
- Children, 75, 92, 100
- China, formerly the mainland, 1, 11
- Chinelas*, a kind of slipper, 59
- Chinese Exclusion Act applied to
Philippines, 43
- Chinese market for Philippine cigars,
217
- Chinese merchants, 219
- Chinese Mestizos, 43
- Chinese pirates, 145
- Chinese population, 43
- Chinese the traders, 68
- Chirino, Padre Pedro, 156
- Chocolate, *see* Cacao culture
- Cholera, 28
- Churches, 91, 265, 266, 323
- "Churchill's Voyages," 295
- Christening ceremony, 57
- Christian population, 8
- Christianity, its influence over the
destiny of the Philippines, 288,
296, 297, 306, 313-316, 319-322,
356
- Chronology of Philippine history,
146-149
- Cigarettes, 180, 206, 227-229, 356
- Cigars, 180, 206, 227-229, 356
- Cigarmakers, 206, 227
- Cinnamon, 158
- Civil Commission, 324
- Civil service, 119
- Civilization at arrival of Spaniards,
138-140
- Civilized tribes, 45
- Cleanliness of Filipinos, 62
- Clerical positions overcrowded, 353,
359
- Climate, general, 9, 10; of Manila,
268-271

- Clothing, 62-64, 278, 279, 330, 341
 Cloth-making, 178, 179
 Coal, 184-186, 261
 Coal lands, 118
 "Coal Measures of the Philippines," 188
 Coast and Geodetic Survey, 25
 Cock-fighting, 96
 Cockatoos, 219
 Cocoanut palm, *see* Coco-palm
 Cocoanuts and cocoanut trees, 22, 160, 189, 202, 220, 258
 Cocoanut, treatment by machinery, 187
 Coco-palm, 160
 Codes, cable, 333
 Coffee-culture, 163, 164
 "Coffee, its Cultivation and Commerce in all Countries," 176
 "Coffee Planting in Southern India and Ceylon," 176
Cogon, or wild grass, 215
 Colony settlements, 358
 Commerce between United States and Philippines, 2, 3
 Commerce of Philippines, 327
 Commercial bond between Philippines and United States, 251, 252, 289, 290
 Commercial field offered by Philippines, 326-341
 Common-law marriages, 299
 Compania General de Tabacos de Filipinas, 211
 Company stores, 358
 Compostela mines, Cebú Island, 186
 Compulsory labor, 209
 Condensed milk for export, 330, 341
 Confectionery, 330, 331
 Congregational Church in Philippines, 324
 Congress of the Philippines, 115
 Conservatism of wealthy Filipinos, 309
 Conservatism, traditional Oriental, 252
 Constabulary Band, 90
 Constabulary, Insular, 97, 111-114, 123, 274
 Convents of Manila, 266
 Cook, Frank C., 349, 350
 Coöperative plantations, 224
 Copper, 185, 186
Copra, dried meat of cocoanut, 158-160, 177, 187, 189, 327
 Cordage industry, 21
 Corn, 158, 219
 Corporations and the public domain, 117-121, 197, 249
 Cotabato, Mindanao, 134, 167
 Cotabato Valley, Mindanao, 244
 Cotton, 158, 159, 219, 261, 328-330
 Courts, Spanish, 109, 110, 151
 Courts, Spanish the language of the, 333
 Courts under Insular Government, 110, 225, 239, 355
 Credulity of natives, 162, 302
 Crimes, 92, 93
 Cross-bill bird, of Benguet region, 11
 Cuba, area compared with Mindanao and Luzon, 4
 Cuban sugar lands, 236
 Customs service, Philippine, 337
 Cutlery, Spanish rule against, 65

 DAET, Luzon, 254
 Dagupan, 19, 22, 271
 "Daily Commercial Bulletin, The," 35
 Dajo Crater, Sulu Island, battle of, 155, 318
 Dalupaon, Luzon, 132, 347
 Dampier, —, writing of hemp in 1686, 191
 Dancing, 58, 59
 Dapitan, Mindanao, 292
 Davao, Mindanao, 195, 202, 350
 Davis, General, 312
 Death, how accepted, 69, 99
 Death rates, comparative, of United States and Philippines, 271
 De Baranda, Isidro Sainz, 188
 De Comyn, Tomás, 179, 188
 Deer, 11, 275, 279
 De la Concepción, Juan, 156
 Delgado, Padre José, 134

- Del Rosario, Señor Tomás G., 73, 74
 De Morga, Antonio, 156, 181, 188
 Department of Fomento, Mexico City, 204
 De Tavera, Dr. T. H. Pardo, 53, 138, 154, 156, 188
 De Villaverde, Padre Juan, 315
 Dewey's victory, 135, 148, 155
 De Zúñiga, Martinez, 156, 325
 Dialects, 8, 40, 44, 47, 54, 300
 Dignity of Filipinos, 97
 Disciples' Church in Philippines, 324
 Domestic science work in the schools, 80
 Dorsey, Clarence W., 228
 Dress of Filipina, 62, 63; of Filipino, 64; of the children, 92
 Drugs and chemicals, 262, 328
 Dutch traders, 330
 Duties, 116, 231, 235, 337
 Dyes, 262
- EARTHQUAKES, 5, 6, 147
 Echague, 7, 218
 Education, 70-86, 310, 311, 353, 354
 "Education in the Philippines during Spanish Domination," 86
 Edwards, H. T., 190, 204
 Egyptian corn, 158
 Egyptian cotton, 159
 Elective franchise, 283-285
 Electrical machinery imported by Philippines, 328
 Electrical power, 253, 254, 260, 261
 Electric-light plants, 260, 261
 Embroideries, 261
 "Engineering and Mining Journal, The," 185, 188
 Engineers' wages, 357
 Engines, stationary, imported by Philippines, 328
 England, exports to, 327
 English financing of Luzon lines, 24
 English language, how Filipino children acquire, 76, 86
 Entertainment of travellers, 274, 304-306
 Episcopal Church in Philippines, 324, 325
- Escalante, 19
 Etas, wild tribe of Mindanao, 53
 European goods, competing with American, 329-340
 Evangelical Union, 325
 Expenses of peasant's home, 301
 Exports, 157; of hemp, 192; of tobacco, 217
- FABI, Angel, 94
 Fabrics of native manufacture, 178
 Fabrics suitable for Filipino manufacture, 261
 Families, size of, 62
 Family life, 95, 97, 100, 302
 Fanaticism of natives, 99
 "Far Eastern Review, The," 35, 175
 Farm hands' wages, 357
 Fauna and flora, variety of, 10, 11
 Featherman, A., 55, 102
 Fertilization of land, 221, 222, 241, 258, 262
 Fibre plants, 158, 159
 Fibre products, manufacture of, 182
 Figs, 158
 Figures of the women, 64
 "Filibusterismo, El" (Dr. Rizal), 292
 Filipino students in American schools, 79
 Filipinos a homogeneous people, 44
 Filipinos as wire operators, 27
 Filipinos hard masters, 303
 Financial standing of Filipinos, 302
 Fingers used in eating, 66
 Fire-extinguishers for export, 330
 Fires for cooking, 66
 Firewood, 258
 Fish and fishing industry, 12, 173, 174, 353
 Fisk, Amos K., 295
 Floods in Cagayan Valley, 220-222
 Flora and fauna, variety of, 10, 11
 Food, 61, 66, 67, 301
 Food-stuffs, 341
 Forage grasses, 159, 276, 278
 Ford, John D., 69

- Foreign influences in Philippines, 347
 Foreman, John, quoted, 69, 76, 88, 99, 102, 206, 207, 211, 224, 228, 340
 Forest fires impossible, 132
 Forests, 12, 19, 21, 122-134, 174, 258
 "Forests of the Philippines, The," 134
 Forestry Bureau, 12, 117, 124, 134, 169, 258
 Fort Santiago, 144, 266
 Foundry-workers, 359
 Fowls, 12
 Francisco, Vicente, 294
 Free trade with the Philippines, 116, 217, 229
 Freight time and rates to United States, 335
 Friar lands, 249
 Friars, 73, 91, 99, 150, 151, 285, 298, 313-315, 319-323
 Fruits, 158, 172, 262
 Funds at disposal of Insular Government, 117
 Furnishings, interior, 258
 Furniture-making, 257, 262

 GAMBLING, 96
 Gas, 185
 Gattaran, 223, 226
 "General History of the Philippines," 156
 General Philippine Tobacco Company, 211-213
Gente baja, or subordinate class, 89
Gente ilustrada, or cultivated class, 89, 90
Gente ilustrisima, 289
 German tobacco-growers, 213, 216
 Glass and glassware, 261, 328
 Goats, 172
 Godparents, 57
 Gold-mining, 186, 187
 Gonzaga, Hon. G., quoted, 225
 Government before advent of Spaniards, 103, 140
 Government-built hotel, Manila, 264
 Government contracts to steamship companies, 25, 26
 Government crop experiments, 159, 164
 Government experiment stations, 168, 174
 Government lands, concerning the taking up of, 117-121
 Government treatment of animal plague, 173
 Granite, 185
 Gregarious habits of Filipinos, 161
 Grouping of Philippine woods, 127, 128
 "Growing Sugar Cane in Hawaii," 250
 Guavas, 159, 220
 Gutta percha, 133, 134, 166-168

 HACIENDA Calabbacao, 215
 Hacienda San Antonio, 208, 212
 Harbor improvements, 8, 13, 15, 24, 25
 Harbors, 8, 13, 15, 17, 19, 20, 22, 24, 25
 Hardwoods, 12, 19, 21, 122-132, 257
 Hart, J. H., 176
 Harvard College library, 156
 Hats and caps, 261
 Hats, Manila, 64, 182, 338, 339
 Hawaiian sugar lands, 236, 237
 "Head-hunters," school among, 81
 "Head-hunters," *see* Igorrotes
 Health and hygiene, measures to assure, 28, 37, 61, 120, 271
 "Hearings before Senate Committee," 229
 "Hearings before the Committee on Ways and Means, Fifty-ninth Congress, First Session," 229
 Heidelbach, Ickelheimer and Company, 17
 Hemp, 21, 158-160, 169, 183, 189-205, 223, 231, 258, 327, 359
 Henequin (hemp), 204
 Hindu influences on Malays, 46, 47, 137-139
 "Historia de las Islas Philipinas," 156
 "Historia General de Philipinas," 156

- "History of China," 156
 History of Philippines, 135-156
 "History of the Philippines, A" (Barrows), 156
 Home life, 300
 Home rule in the Philippines, 115, 311
 Home-spun cloths, 63
 Honesty, 162
 Horses, 11, 12, 172, 276
 Hospitality of Filipinos, 88, 89, 96, 100, 303-306
 Hotels, Manila, 264, 274
 House servants, 38
 Houses, native, 6, 64, 65, 138, 303
 Hull, E. C. P., 176
 Humboldt, A. von, quoted, 46, 156
 Hunting, 279
- IBILAO tribe, 52
 Ice-making plants, 260
 Ide, Henry C., 110, 111
 Igorrotes, 47-54, 59, 63, 66, 81, 98, 137, 145, 164
 Ilagan, 223
 Ilagan Bay, 253, 254
 Ilicos Sur, 354
 Iligan, Mindanao, 203
 Ilocanos, of Luzon, 98, 138, 171, 303, 358
 Iloilo, 19, 20, 25, 232, 243, 273, 354
 Ilongotes tribe, 53
Ilustrados, 288, 289
Ilustrisimo, or ruling class, 71
 Imitation, a racial trait, 95
 Immigrant farmers among natives, 352
 Importers in Philippines, 332-334, 339, 340
 Independence for Philippines, discussion of, 308-311
 "India Rubber World, The," 176
 Indigo, 158, 171, 177, 183
 Indolence, 98
 Indonesians, 41, 42
 Industrial training, 51, 77, 80, 353, 354
 Industry of natives, 98, 99, 161, 302
 Infant mortality, 28, 29, 61, 65
- "Inhabitants of the Philippines, The," 102
 Inquisitiveness concerning strangers, 68
 Insular Government, 16, 27, 81, 110, 115, 255, 256
 Interest rate to farmers, 26, 238, 239
 Interior, travel through, 218, 219, 274-279, 303-306
 Inter-island steamers, 26, 213, 255, 273
 Internal revenue, 117, 119, 206
 International Banking Corporation, 17, 34
 Iron and steel, structural, imported by Philippines, 328
 Iron-moulders' wages, 180
 Isabel Province, 213, 220, 221
 Islands, number of, 1
- JÄGOR, J., 55, 87
 Japan, distance from Philippines, 3; fertility of soil, 157
 Japanese, Filipinos, dislike for, and the cause, 43
 Japanese Government rubber culture, 167
 Japanese in Philippines, 359
 Japanese market for Philippine cigars, 217
 Japanese terraces, 49, 50
 Japanese type, Filipinos approach the, 43
 Java coffee crop, 163, 164
 Java, Hindu ruins in, 47, 136, 137
 Java, sugar-raising, 245, 246
 Javanese rice-terraces, 49
 Javanese rubber cultivation, 168
 Jenks, Albert Ernest, 55
 Jernegan, Prescott F., quoted, 83
 Jewelry, 59, 261, 341
 Jolo, 318
 Judiciary of the Philippines, 110
 Jungle fowl, 11
 Jungles, 276, 277
Juramentado among Moros, 318, 319
Jusi, hemp fabric, 63
 Justice administered by Philippine Commission, 109

- KAFFIR** corn, 158, 165
 "Kansas of the Philippines," 175
 Karlin, 185
 Ker and Company, 233
 Killebrew, — ("Tobacco Leaf"), 228
 Kindergartens, 80
 Knives and forks, Spanish rule against, 65
 "Kosmos," 156

LABORERS' wages, 357
 Lace, 261
 La Compte, Henri, 176
 Laguna de Bay, 268, 272
 Laguna Province, 22
 Lake Lanao, Mindanao Island, 163, 253, 254
 Lala, Ramón Reyes, quoted, 55, 100
 Land laws, 117-119
 Land tax, 117
 Land titles, 119
 Landor, Henry Savage, 102
 Laoag, 19, 22, 175
Lauan, red, 19
 Laundrying, 62
 Lauret, A., 176
 Law and morality among wild tribes, 52
 Lead, 185, 186
 Legal profession, 294, 295
 Legaspi, Miguel Lopez de, 142-146, 312, 313, 316
 Legaspi-Urdaneta Monument, Manila, 312
 Lepers in Philippines, 320
 LeRoy, James A., 121
 "Leslie's Weekly," quoted, 317-319
 "Lessons on Familiar Philippine Animals," 87
 Leyte Island, 4, 186, 193
 "Liberal, El" (Madrid), quoted, 209
 Libraries of Manila, 266
 Light-houses, 25
 Limitations placed upon Filipinos by Spanish, 65, 74, 91, 177
 Liquor, 111, 181, 303
 Literacy, 91, 282
 Literary tastes of Filipinos, 293

 Livery rates, Manila, 264
 Live-stock industry, 172, 173
 Living comforts and expenses in the provinces, 38
 Loans on agricultural lands and products, 26
 Local autonomy granted by Government, 283, 284
 Lock, C. G. W., 176
 Loney and Company, 233, 235
 Loney, Nicholas, 233
 Los Baños, Laguna Province, 6, 263, 319
 Lucena, 22
 Lumbering industry, 128-132, 182
 Luneta, Manila, 268, 312
Luthu, a native tuber, 220
 Luzon Island, 4, 16-19, 21, 22, 48, 163, 167, 171, 175, 183, 186, 193, 199, 208, 217, 218, 221, 224, 225, 232, 233, 254, 272, 274-279, 358
 Lyon, William S., 231, 247, 250

MACHINISTS, native, needed, 353, 359; wages, 357
 Magat River, 218
 Magat Valley, 9
 Magellan's discovery of the archipelago, 2, 135, 140, 141, 146, 178
 Maguey, 169, 170, 192, 204; *see* Hemp
 Mail-order businesses, 339
 Mail service, 26
 Mails to United States, 335, 336
 Maize as a substitute for rice, 66
 Malabon, Rizal Province, 183, 240, 256
 Malay origin of Filipinos, 41, 136, 137, 282, 306
 Malay population, 8, 51, 54; divided into religious groups, 44
 Mallet, —, quoted, 71, 72
 Mangoes, 158, 159
 Manihot plant, 166
 Manila, 2-4, 13, 22, 24, 35-37, 46, 132, 143, 146, 147, 149, 153, 178-183, 193, 206, 227, 236, 250, 256, 257, 263-274, 304, 312, 316, 319, 332, 354

- "Manila American, The," 35
 Manila and Dagupan Railroad, 17, 18, 22, 23, 148, 271
 Manila Bay, 8, 24, 25, 46
 "Manila Daily Bulletin," 252
 "Manila Daily Commercial Bulletin, The," 175, 270, 296
 Manila hats, 64, 182, 338, 339
 Manila hemp, 169; *see* Hemp
 Manila Railroad Company, 17, 18, 27, 272
 "Manila Times, The," 35
 Manufactures, 177-187, 255-262
 Marble, 185, 260
 Marche, Alfred, 86
 Marinduque Island, 186, 193
 Mariveles Mts., seen from Manila, 268
 Mariveles, on Manila Bay, 185
 Market for American goods, 326-341
 Market-places, 51, 52, 67
 Marriage customs, 60, 298, 299, 303
 Martyrdom of Filipino missionaries in Japan, 320
 Masbate Island, 5, 187
 Masbate Island, Governor of, quoted, 301
 Mavor, John, of London, 156
 Mayon, or Albay, Volcano, 5
 McClellan, A. C., 203
 McKasky, H. D., 188
 Mechanical arts, Filipinos adapted for, 51
 "Mediterranean sweets," introduction of, 160
 Mendoza ("History of China"), 156
 Mercantile establishments in Manila, 37
 Mercury, 185
 Mestizos, or half-bloods, 42
 Methodist Church in Philippines, 324
 Mexican dollar retired, 119
 Meyen, F. J. F., 156
 Midday rest, 357
 Miller, O. C., 55
 Millet, 159
 "Mindanao Daily Herald, The," 35
 Mindanao Island, 4, 35, 41, 42, 51-53, 167, 193, 195, 202, 274, 275, 314, 315, 318, 350
 Mindoro Island, 5, 124, 167, 169, 186, 193
 Mineral claims, 118
 Mineral springs, 6
 "Mines and Minerals in the Philippines" ("The Engineering and Mining Journal"), 188
 Mining, 185
 Mining companies, 36
 Missionaries to Japan, 319, 320
 Mission of Filipinos in the Orient, 306; to themselves, 306
 Mission of United States in Philippines, 85, 307
 Models constructed by school-children, 77
 Mohammedanism, 45-47, 137, 139, 156, 316-319
 Mohammedan Malays, *see* Moros
 Molave timber, 126, 127
 Monetary system, 119, 207
 Money, among Moros, 52
 Money-lenders, 238, 239
 Money-order department of mail service, 26
 Monkeys, 219
 Morality and law among wild tribes, 52
 Moros, 44-47, 51-54, 106, 139, 145, 155, 156, 244, 297, 314, 316-319, 352, 356
 Mountains, 5, 276, 277
 Mourning, period of, 69
Musa paradisiaca (plantain), 190
Musa sapientum (common banana), 190
Musa textilis (hemp), 189
 Music, 56, 57, 72, 90, 95
 Musicians' pay, 180
 Myrick, — ("Tobacco Leaf"), 228
 NAILS imported by Philippines, 328
Narra (mahogany), 20, 128
 National Association of Manufacturers, 223
 Native priests, 322, 324
 Negrito, treatise on the, 55
 Negritos, or aboriginal dwarf blacks, 41, 42, 53, 59, 136, 137

- Negros Island, 4, 18-20, 125, 128, 132, 183, 186, 193, 232, 237, 244
 Negros Occidental Province, Governor of, quoted, 302
 Negros Oriental Province, 162
 Negros Oriental Province, Governor of, quoted, 301
 Newspapers, 35, 36, 147
 Nicholls, H. A., 176
Nicotiana tabacum, 206
 Night work of farmers, 65, 175
 Nitre, 185
 "Noli me Tangere" (Dr. Rizal), 292
 Nozaleda, Bishop, 297
 Nueva Caceres, 21, 193, 319
 Nueva Ecija Province, 23, 186
 Nueva Viscaya Province, 49
 Nueva Viscaya Province, salt mine in, 67
 Nutmegs, 158
- OARSMEN, native, 349
 Occupations filled by Filipinos, 343
 "Official Handbook of the Philippines," quoted, 221
 Old age held in veneration, 95, 100
 Oranges, 158, 160, 220
 Orchids, 277
 Oriente Hotel, Manila, 123
 Orr, John, 128, 347-349
 Orres, Señor, manager San Antonio hacienda, 212
 Osaka Iron Works, Japan, 359
 "Our Philippine Problem," 121
 Outfit for travelling, 278, 279
 Owners, not renters, on farms, 163
 Oxen, 278
- PACIFIC Coast, distance from Manila, 3
 Packard, Robert L., 86
 Packing goods for Filipino trade, 330, 336-338
 Pack trains, cost of, 274
 Paco Cemetery, Manila, 69
 Paddies, rice-terrace, 49
 Padres, their teaching concerning truthfulness, 94
 Palawan Island, area, 4
 Pampanga Province, Luzon, 183
 Pampangas tribe, 138
 Panaqui in Tarlac, 175
 Panay (Visayan group), area, 4; railroads, 16-18, 20
 Panay River, 7
 Pangasinans tribe, 138
Panuelo, neck-cloth worn by the women, 63
 Paper and paper products, 262, 328
 Paragua, *see* Palawan
 Parsons, William Edward, 267
 Pasacao, Luzon, 21, 22, 193
 Pasig, 354
 Pasig River, 265, 268
 Paterno, Pedro, 149
 Patriotism, 75, 76, 103, 280, 281
 Patriots, honor to memory of, 291
 Pauperism, 93
 Peanuts, 158, 159, 219
 "Pearls of the Orient, The," 102
 Penury, business of women, 298
 Peonage, 106, 208, 224, 239, 355
 "Peopling of the Philippines, The," 102
 Pepper, 158, 170
Peseta, 358
Peso, 356
 Petroleum, 185
 Philippine Commission, 27, 108, 109, 115, 119, 149, 221, 272, 289
 Philippine Company, *see* Royal Philippine Company.
 "Philippine Forests," 134
 "Philippine Geology," 188
 Philippine Islands, location, 1; area, 1; comparative area, 2; on main route of Pacific Ocean travel, 2; distance from Pacific ports, 4; population, 8
 "Philippine Islands, The" (A. H. Clark Co.), 156
 "Philippine Islands, The" (De Morga), 188
 "Philippine Islands, The" (Foreman), 69, 88, 102, 228
 "Philippine Islands, The" (Lala), 55
 "Philippine Islands, The" (Legaspi), 325

- "Philippine Islands and their People, The," 55
 Philippine Organic Act, *see* Act of July 1, 1902
 Philippine Railway Company, 17, 20
 "Philippines and Roundabout, The," 188
 "Philippines and the Filipinos, The," 121
 "Philippines and their People, The," 156
Picul, 212
 Pigeons, 12
 Pila, 319
 Pimontel, Gov. Juan, quoted, 82, 301
Pina, pineapple leaf fabric, 63
 Pineapples, 158
 Pine forests, 124, 277
 Pipes and fittings imported by Philippines, 328
 Pita hemp, 191
 Plague, among animals, 12, 120, 173
 Plantain, 190
 Platinum, 185
 Polillo Island, 184
 Political indifference of agricultural class, 98
 Polygamy among Moros, 53, 54
 Pony-racing, 173
 Population, 8, 41, 42, 45, 151, 152, 218, 314
 Postage between United States and Philippines, 336
 Postal savings banks, 26
 Post-offices, 26
 Potatoes, 158, 165, 219
 Pottery imports and raw materials, 261, 328
 Poverty of peasants, 302
 Predatory animals, 12
 Presbyterian Church in Philippines, 324
Presidentes, or mayors of municipalities, 283, 285, 289, 303
 Press, American, in Manila, 35, 36
 Press, native, 35
 "Primer Viaje," 156
 Print goods, 261, 328
 Private lands, 248
 "Pronouncing Gazetteer and Geographical Dictionary of the Philippine Islands," 14, 221, 228
 Prosperity, 205, 286, 287, 289, 307, 308
 Protestantism, 324, 325
 Provincial governors, 289
 "Psychologisches in der Philippine-Frage," 69
 Public lands, 117-121, 197, 236, 248, 249
 Pumps and pumping machinery imported by Philippines, 328
 Pygmies, 42, 136
 QUARANTINE of live-stock, 12, 120, 173, 216
 Quarrying industry, 185
 Querol, —, Spanish sculptor, 312
 Quicksilver, 185
 RAINFALL, 10
 Railroads, 15-24, 192, 193, 244, 254
 Redwood timber, 126
 Refineries, sugar, 231, 232, 236, 240, 256
 "Reisen in den Philippines," 55, 87
 "Relación de las Islas Filipinas," 156
 Religion, 8, 44, 47, 56, 91, 138, 150, 300, 322-324
 Religious orders, 322, 323
Repertimiento system of land grants, 151
 Report of Commission of Education of United States for 1897-1898, 87
 Reports of Philippine Government Bureaus, 121
 Reports of the Philippine Commission, 14, 39, 85, 228
 Retana, Spanish author, 47, 295
 Revenues under Spanish rule, 152
 Rice, 158, 159, 166, 260
 Rice, manner of cooking, 66
 Rice-terraces, Igorrote, 48-51, 98.
 Rinderpest, Government treatment of, 120, 173
 Rio Cagayan, *see* Cagayan River
 Rio Grande de Mindanao, 6, 7

- Rio Malanas Valley, 186
 Rivers, 6, 218, 253, 276
 Rizal, Dr., 148, 154, 155, 291-293
 Rizal Province, Luzon, 186
 Road-building, 27, 315
 Rockmen's wages, 357
 Rojas, Judge Felix M., 294
 Romblón Island, 173
 Roosevelt, President, quoted, 351
 Rope-making, 183, 190, 191, 256, 257, 261
 Royal Philippine Company, 153, 178
 Rubber, 132-134, 166-169
 "Rubber and Gutta Percha in the Philippines," 134
 Rubber trees, 159, 167, 168
 Rubber vines, 132, 133, 159, 167
 Russell, Sturgis, and Company, of Boston, 233, 235

 St. Louis World's Fair, Constabulary Band at, 91; forestry exhibit, 125; wood carvings, 294
 St. Mary's and St. John's Cathedral (Episcopal), Manila, 325
 Saddlers' wages, 180
 Salaries paid school-teachers, 78, 79
 Salcedo, 140, 143-145
 Saleeby, Najeeb M., 156
 Salomon, William, and Company, 17
 Salt, 67, 185
 Samar Island, 4, 186, 193
 San Antonio hacienda, 208, 212
 Sanchez, A. M., soil physicist, quoted, 222
 San Fernando de Union, 22
 San José, Batangas Province, 164
 San Juan de Ilog, 19
 San Lazaro, Manila, 320
 "Sanskrit Influence in the Tagalog Tongue," 156
 Sanskrit element in the language, 46, 137-139
 Santa Maria, Mindanao, 132
 Savage rites, similarity in, 52
 Sawmills, 132, 257
 Sawyer, Frederick H., 102

 Schools, 70-86, 92, 353, 354
 School-teachers, 77-79, 81-84
 Scriptures circulated by Protestant missionaries, 325
 Sea-going Malays, 50, 137, 306
 Self-government, natives learning, 283-286, 289, 301
 Self-support of Philippine Government, 117
 "Semi-civilized Tribes of the Philippine Islands, The," 55
 Semper, Carl, 73, 156
 Servants, 97, 100
 Sesamum, 171
 Sewing-machines, 63, 259, 358
 Sheep, 172
 Shepard, Frank, 203
 Sherman, Penoyer L., 134
 Shipbuilding, 181
 Shipping American goods to Philippines, 334-338
 Shoes, 64, 328, 339, 341
 Silos, 258
 Sisal hemp, 169, 204
 "Six années de voyages aux Philippines," 86
 Size of farms, 161
 Slavery, 52, 106, 107, 140, 208, 355
 Sleeping places in peasants' houses, 65
 Small grains, 158
 Smallpox, Government treatment of, 120
 Soap stocks, 187, 262
 Social gatherings, 56, 58, 67, 96, 268
 "Social History of the Races of Mankind, A," 55, 102
 "Soil Conditions in the Philippines," 228
 Soils, 157, 158, 215, 222, 240, 241
 Sorghum, 158, 165
 Sorsogon, 354
 Sorsogon Province, 21, 186, 193
 Sousa's Band, 91
 South American rice-terraces, 49
 Spanish conquest of Philippines, 138, 316
 Spanish customs, 90
 Spanish influence, 285, 287, 288

- Spanish introduction of products not native to Philippines, 159, 160, 207
 Spanish language, 47, 74, 111, 321, 333
 Spanish names borne by Filipinos, 76
 Spanish police in Philippines, 319
 Spain's restrictive rule, 104, 105, 150, 177
 Spenders, Filipinos are good, 329
 Speyer and Company, 17
 Spices, 158
 Stallion fights, 173
 Stanley, H. J., of London, 188
 "State of Philippine Islands," 188
 "State of the Philippines," 179
 Steamship lines, proposed new, 3
 Stone-cutting industry, 185
 Stores, 68
 "Story of the Philippines, The," 295
 Stoves, substitutes for, 66
 Straits Settlements, rubber culture in, 168
 Street-railways in Manila, 24, 32, 33, 344-347
 Streets, Eastern, 346
 Strikes, 356
 Stubbs, William C., 250
 "Studies in Moro History, Law, and Religion," 156
 "Studies of the Philippine Islands," 325
 Stumpage, 118, 128, 129, 258
 Stuntz, Rev. Homer C., quoted, 94
 "Sucesos de las Islas Filipinas," 156
 Suffrage, arguments to extend to women, 297
 Sugar and sugar cane, 19, 158-160, 177, 183, 189, 194, 205, 219, 230-250, 256, 327
 Sugar bags, 262
 Sugar haciendas, size of, 119
 Sulphur, 185
 Sulu Archipelago, 145, 167, 273, 316, 318
 Superstitions, 68, 69, 99
 Surra, a horse plague, 173
 Sweetmeats, 67
 Sweet potatoes, 158, 219
 Swift, Charles W., 17
 TAAL Lake, 272
 Taal Volcano, 5, 156, 272
 "Tabac, Le," 176
 Tabacalera Company, 208, 212, 274
 Tablas Island, 169
 Taft, William H., 94, 221, 223, 228, 267, 288, 315, 321-323
 Tagálogs, 46, 72, 138, 140, 316
 Tanning industry, 258
Tao, or farmer, 71
 Tapioca, 166
 Tariff laws, 116, 341
 Tarlac Province, Governor of, quoted, 303
 Tayabas Province, 22
 Taylor, Carson, 252
 Taylor, Captain John R. M., quoted, 320
 Telegraph lines, 27, 148
 Telephone lines, 27, 113, 148
 Textile manufactures, 178, 179, 261
 Textiles imported by Philippines, 328
 Threads, 261
Tiendas, or stores, 68
 Ties, railroad, 258
 Timber, 12, 122-132
 Timber lands, 117, 118
Timerau, or jungle buffalo, 12
 "Tobacco Leaf," 228
 Tobacco monopoly, 147, 207-211, 225
 Tobacco, raw and manufactured, 158-160, 177, 180, 189, 205-228, 231, 234, 240, 327, 356
 "Tobacco Soils of the United States," 228
 Tomatoes, 158
 Tools, 162, 215, 242, 259, 328
 Torrens system in Philippines, 119
 Toys, 261
 Trades workers, instruction of, 353, 354
 Tramp steamers, 4
 "Travels around the Earth," 156

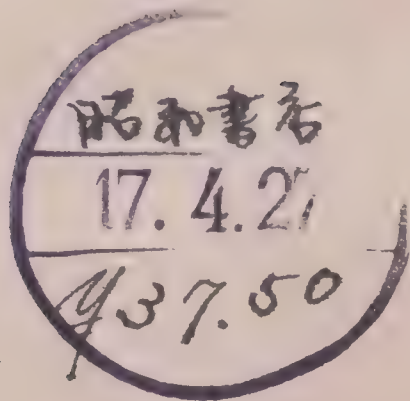
- Travels in interior, 218, 219, 278, 303-306
 Treaty of Paris, 116
 Tree-ferns, 277
 Tribal wars, 54
 "Tropical Agriculture," 176
 Tropical diseases, Government investigation of, 120
 Tropics, conditions to health in the, 37
 Tropics, goods suitable for, 329, 332, 338
 Truth-telling, Oriental conception of, 93, 94
 Tuguegarao, 215, 216, 218
 Typewriters imported by Philippines, 328
 Typhoons, 25
- UNITED Brethren in Philippines, 324
 United States, consumption of rubber, 168 ; of Philippine tobacco, 222, 228 ; of sugar, 245-247
 United States, cost of producing beet sugar, 235
 United States exports to Philippines, 327
 University of Manila, 73, 74, 321
 University of Santa Tomás (University of Manila), 73, 74
 Urdaneta, monument to, 312
 Urrez, Don Francisco, 178
- VALLEYS, 9
 Vanderbilt, Cornelius, 17
 Vegetable oils, 158, 171, 177
 Vegetables, 158, 159, 172, 219
 Vehicles imported by Philippines, 328, 329, 341
 "Vida Filipina, La," 290
 Vidal ("General History of the Philippines"), 156
 Vigan, 171
 Vigan, Bishop of, quoted, 303
 Villamor, Judge Ignacio, 294
Vino, a native alcoholic drink, 111
 Virchow, Rudolf, 102
 Visayan Islands, 4, 138, 140, 232, 233, 244
 Visayan Syndicate, 20
 "Visit to the Philippine Islands, A," 69
 Vocalists, Filipino, 294
 Volcanic eruptions, 5
- WAGES, 180, 181, 197, 237, 356, 357
 Wagon journey through interior, 278
 Walled city of Manila, 264-266
 Walton, William, of London, 188
 Washing of food, 67
 Water buffalo, *see* Carabao
 Water hemp, 191
 Water supply, measures to obtain pure, 28
 Weapons, the carrying of, 279
 Weddings, 96, 97
 "Weekly Sugar Trade Journal," 250
 Wheat, 159
 Wheeler, Charles E., 255
 Whiskey, 328
 White, John, 191
 White, J. G., and Company, 17
 Whitney, Milton, 228
 Wild boar, 11, 276, 279
 Wild tribes, 45, 46, 50, 52-54, 69, 297
 Willett and Gray, New York, publishers, "Weekly Sugar Trade Journal," 250
 Willis, Henry Parker, 121
 Windmills, 339, 341
 Wire and wire cables imported by Philippines, 328
 Wire service, 27; *see* Telephone and Telegraph lines
 Women, American, in the Philippines, 202
 Women, native, 53, 54, 58-64, 95, 296-302
 Wood, Major-General Leonard, 195, 248, 352, 353
 Worcester, Dean C., 55, 99, 169, 219
 Workmen, Filipino, 343-352, 356-359
 Wray, Lieutenant, 184
 Wright, Gen. Luke E., 112

INDEX

431

Written native language before ad- vent of Spanish, 46, 71, 138	Yngchausti, and Company, 256, 257 Younghusband, G. J., 188
XEREZ, Dr. Manuel, quoted, 99	ZAMBOANGA, Mindanao, 35, 169, 185, 273, 354
"YANKEES of the Philippines," 358	Zinc, 185
Yarus and threads, 261	Zinn, A. O., 169

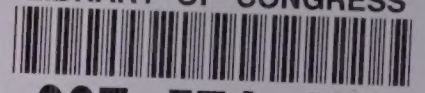
THE END



SHŌWA SHOTEN, INC.
FOREIGN BOOKS STORE
HONGO, TOKYO JAPAN

No. 68237
¥ 37.50

LIBRARY OF CONGRESS



0 027 574 480 3